DATA VALIDATION REPORT PERFORMANCE VERIFICATION SAMPLING EVENT SEPTEMBER 2008

Groundwater Migration Control System Sauget Area 2

Prepared for
Solutia Inc.
c/o Bill Johnson
575 Maryville Centre Drive
St. Louis, MO 63141

February 2009

URS Corporation 1001 Highlands Plaza Drive West, Suite 300 St. Louis, MO 63110 (314) 429-0100 Project #21561913



February 13, 2009

Mr. Bill Johnson Solutia Inc. 575 Maryville Centre Drive St. Louis, Missouri 63141

Re: Data Validation Report Groundwater Migration Control System Surface Water and Sediment Sampling Event – September 2008 Sauget, Illinois URS Project No. 21561993

Dear Bill:

URS Corporation (URS) is pleased to present this Data Validation Report for surface water and sediment sampling, conducted as part of the Groundwater Migration Control System Performance Verification Sampling Program. This report provides:

- 1. A brief summary of field activities
- 2. A figure showing the sampling locations
- 3. Detection tables
- 4. Sample summary lists
- 5. Data validation checklists
- 6. Data tables
- 7. Qualifier definition tables.

SCOPE OF WORK

The surface water and sediment sampling field activities were conducted on September 4, 2008 in accordance with the Surface Water and Sediment Performance Verification Sampling Plan dated January 31, 2003. During the sampling event, surface water and sediment samples were collected from a total of five locations immediately adjacent to Site R, stations PDA-2,3,4,5 and 9 as defined in the Menzie Curra sampling effort in 2000.



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Surface Water Monitoring

Surface water samples were collected at the sediment-water interface (within 1 foot of the bottom) at all stations. Because of the volumes required and sampling limitations due to the fast currents, a peristaltic pump system was utilized using decontaminated tubing at each sample location.

Surface water samples were submitted to the laboratory unfiltered and analyzed for VOCs, SVOCs, pesticides, herbicides and metals; a matrix spike/matrix spike duplicate (MS/MSD) sample was analyzed for VOCs, SVOCs, pesticides, herbicides, and metals. One trip blank was submitted and analyzed for VOCs. VOC samples were collected by directly filling 3-40 mL VOA vials from the peristaltic pump tubing to minimize VOC and preservative loss. Samples for metals analysis were filtered and preserved at the laboratory and an additional sample was collected and submitted to the laboratory for trace metals analysis at each sample location. In addition, field measurements were recorded for temperature, pH dissolved oxygen and conductivity.

Surface water samples were appropriately labeled with the sample location, requested analysis, preservative, date and time sampled and sampler's initials. Samples were maintained at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ with ice and shipped in coolers to Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody (COC) documentation was shipped with the samples to the laboratory.

Sediment Sampling

Sediment samples were collected using a Ponar Dredge sampler from the upper few inches (5 to 6 cm) at each sample location. This depth interval was selected as the zone most relevant of exposures to ecological receptors. Sediment samples were analyzed for VOCs, SVOCs, pesticides, herbicides, and metals; an equipment blank sample was analyzed for VOCs, SVOCs, pesticides, herbicides and metals.

VOC samples were collected from the first grab using a 5 mL modified syringe/plunger. The plunger tube was inserted into the sediment below the surface and removed slowly to prevent



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sample loss. The plunger was then used to extrude the sample into pre-weighed sample vials. One sample vial contained sodium bisulfate preservative for low-level analysis and the other two vial contained methanol for high-level analysis. Sediment samples for all other parameters were collected from a composite of the upper few inches of sediment from additional grab samples at each sample location. Sediment was removed from the sampler and homogenized in a stainless steel bowl using a stainless steel spoon. Once the sediment was homogenized, sample containers were filled using the stainless steel spoon. All sampling equipment was decontaminated before moving to the next sample location.

Sediment samples were appropriately labeled with the sample location, requested analysis, preservative, date and time sampled and sampler's initials. Samples were maintained at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ with ice and shipped to Severn Trent Laboratory (STL) in Savannah, Georgia. The chain-of-custody (COC) documentation was shipped with the samples to the laboratory.

Should you have any questions or comments regarding this Data Validation Report, please do not hesitate to contact me at 314.429.0100

Very truly yours,

PollOLL

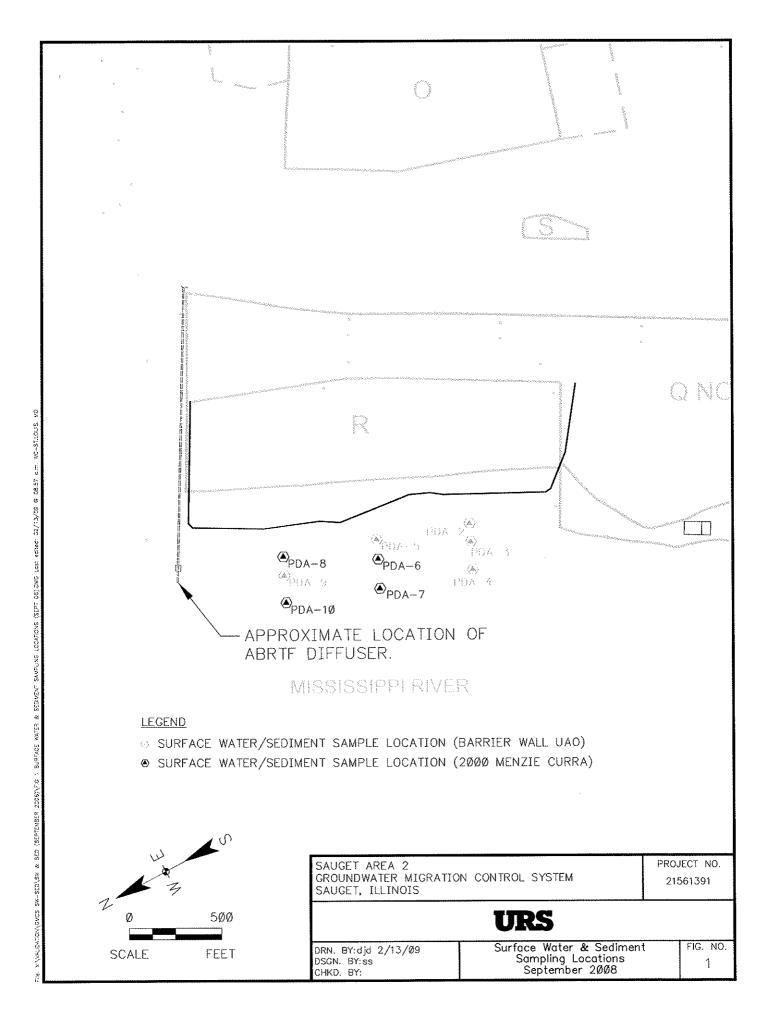
Robert Veenstra Vice President

Enclousre

RBV/BH:mlr



Figure





Detection Tables

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Benzene	1	ug/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Carbon Dioxide	58	ug/L	TBJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Chlorobenzene	22	ug/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	1	Sulfur dioxide	5900	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	1	Toluene	1	ug/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	1,4-Dichlorobenzene	0.7	ug/L_	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2-Pentanone, 4-hydroxy- 4-methyl-	19	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	3,6-Dioxa-2,4,5,7- tetrasilaoctane, 2,2,4	13	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Bicyclo[2.2.2]oct-7-ene- 2,5-dione	4.6	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Butane, 2-methoxy-2- methyl-	82	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Isoquinoline, 1,2,3,4- tetrahydro-6-metho	7.6	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	P-Chloroaniline	14	ug/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Phosphine oxide, triphenyl-	17	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Aluminum	1.1	mg/L		
			SW-SA2-GMCS-2	9/4/08	Metals	Arsenic (Dissolved)	0.0023	mg/L	J	
			SW-SA2-GMCS-2	9/4/08	1	Barium	0.11	mg/L		
			SW-SA2-GMCS-2	9/4/08		Barium (Dissolved)	0.075	mg/L		
			SW-SA2-GMCS-2	9/4/08	Metals		54	mg/L		
		1	SW-SA2-GMCS-2	9/4/08		Calcium (Dissolved)	50	mg/L	В	
1	1		SW-SA2-GMCS-2	9/4/08		Chromium	0.0023	mg/L	J	
		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Cobalt	0.0012	mg/L	J	
		1	SW-SA2-GMCS-2	9/4/08		Copper	0.0034	mg/L	J	
		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Copper (Dissolved)	0.0023	mg/L	J	
1	1	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals		1.3	mg/L	ļ	
		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Iron (Dissolved)	0.031	mg/L	J	
		·	SW-SA2-GMCS-2	9/4/08		Magnesium	24	mg/L	<u> </u>	
		I B	SW-SA2-GMCS-2	9/4/08		Magnesium (Dissolved)	22	mg/L	ļ	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Manganese	0.16	mg/L	<u> </u>	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
			SW-SA2-GMCS-2	9/4/08	Metals		0.0054	mg/L	J	
	.E		SW-SA2-GMCS-2	9/4/08		Nickel (Dissolved)	0.0031	mg/L	J	
			SW-SA2-GMCS-2	9/4/08	L	Potassium	4.1	mg/L		
		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Potassium (Dissolved)	3.6	mg/L		
		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	1	Sodium	29	mg/L		
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	1	Sodium (Dissolved)	27	mg/L		
Surface Water	!	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Vanadium	0.0059	mg/L	J	
Surface Water	<u> </u>	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Vanadium (Dissolved)	0.003	mg/L	J	
Surface Water			SW-SA2-GMCS-2	9/4/08	Metals		0.017	mg/L	J	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	1	Benzene	0.43	ug/L	J	
[Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		Carbon Dioxide	62	ug/L	TBJN	
	1		SW-SA2-GMCS-3	9/4/08		Chlorobenzene	8.5	ug/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Toluene	0.95	ug/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	1,3-Cyclopentadiene	7.7	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	1-Chloro-1-methyl-1- silacyclo-2,4-hexadi	5.7	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2H-1-Benzopyran-2-one, 6-hydroxy-7-metho	4.2	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2-Pentanone, 4-hydroxy- 4-methyl-	12	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	3,6-Dioxa-2,4,5,7- tetrasilaoctane, 2,2,4	8.9	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Butane, 2-methoxy-2- methyl-	51	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Cyclotetrasiloxane, octamethyl-	4.1	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Indole, 3-benzoyl-	7.1	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Phosphine oxide, triphenyl-	14	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Aluminum	1.6	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Arsenic	0.0035	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Arsenic (Dissolved)	0.0051	mg/L	J	

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Barium	0.12	mg/L		**************************************
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Barium (Dissolved)	0.078	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Cadmium	0.0009	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Calcium	55	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Calcium (Dissolved)	51	mg/L	В	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Chromium	0.0034	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Cobalt	0.0019	mg/L	J	······
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Copper	0.0051	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Iron	1.9	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Lead	0.0033	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Magnesium	25	mg/L		=
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Manganese	0.17	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Nickel	0.0031	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Nickel (Dissolved)	0.0023	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Potassium	4.2	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Potassium (Dissolved)	3.6	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Sodium	28	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Sodium (Dissolved)	26	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Vanadium	0.0078	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Vanadium (Dissolved)	0.004	mg/L	J	***************************************
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Zinc	0.022	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Carbon Dioxide	61	ug/L	TBJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Toluene	0.87	ug/L	j	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	(Carbethoxyethylidine)tri phenyiphosphora	10	ug/L	TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	1H-Indole, 1-methyl-2- phenyl-	5.2	ug/L	TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	phenyinicotinonitrile	13	ug/L	TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	4-methyl-	18	ug/L	TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	3,6-Dioxa-2,4,5,7- tetrasilaoctane, 2,2,4	17	ug/L	TJN	

Media	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Lab Qualifiers	URS Qualifiers
iviedia	Site	Location	Sample ID	Date	1	Butane, 2-methoxy-2-	Nesuit	Offics		Quantiers
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	methyl-	66	ug/L	TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Cyclopropane, 1,1- dichloro-2-ethenyl-	74	ug/L	NLT	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Aluminum	2.5	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Arsenic (Dissolved)	0.0042	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Barium	0.12	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Barium (Dissolved)	0.076	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Calcium	53	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Calcium (Dissolved)	50	mg/L	В	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Chromium	0.0036	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Cobalt	0.0025	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Copper	0.0056	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Iron	2.9	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Lead	0.0036	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Magnesium	24	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Manganese	0.18	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Nickel	0.0046	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Nickel (Dissolved)	0.002	mg/L	J	
	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Potassium	4.1	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Potassium (Dissolved)	3.4	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Sodium	25	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Sodium (Dissolved)	24	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Vanadium	0.0096	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Vanadium (Dissolved)	0.0029	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Zinc	0.029	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Bromomethane	27	ug/L		J
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Toluene	0.34	ug/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Nonacosanol	6.5	ug/L	TJN	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Phosphine oxide, triphenyl-	97	ug/L	TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Aluminum	2.8	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Arsenic (Dissolved)	0.0084	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Barium	0.11	mg/L		

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Barium (Dissolved)	0.075	mg/L		***************************************
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Calcium	51	mg/L		1.01
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Calcium (Dissolved)	49	mg/L	В	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Chromium	0.0037	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Cobalt	0.0026	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Copper	0.0038	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Iron	3	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Magnesium	24	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Manganese	0.21	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Nickel	0.0037	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Potassium	4	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Potassium (Dissolved)	3.4	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Sodium	23	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Sodium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Thallium	0.0044	mg/L	J	
			SW-SA2-GMCS-5	9/5/08	Metals	Vanadium	0.011	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Vanadium (Dissolved)	0.0033	mg/L	J	
Surface Water	RIVER	I	SW-SA2-GMCS-5	9/5/08	Metals	Zinc	0.021	mg/L		
			SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Bromomethane	15	ug/L		J
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Toluene	0.49	ug/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	1-Docosene	7.4	ug/L	TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	3H-Pyrazol-3-one, 2,4- dihydro-5-methyl-4	4.6	ug/L	TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	3-Penten-2-one, 4- methyl-	16	ug/L	TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Butane, 2-methoxy-2- methyl-	110	ug/L	TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Hydrazine, 1,1-bis(1- methylethyl)-	24	ug/L	TJN	
			SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Phosphine oxide, triphenyl-	150	ug/L	TJN	
	1		SW-SA2-GMCS-5-DUP	9/5/08		Aluminum	2.9	mg/L		
		1	SW-SA2-GMCS-5-DUP	9/5/08		Arsenic	0.0039	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Barium	0.11	mg/L		

	[Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
			SW-SA2-GMCS-5-DUP	9/5/08	Metals	Barium (Dissolved)	0.073	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Calcium	53	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Calcium (Dissolved)	48	mg/L	В	
			SW-SA2-GMCS-5-DUP	9/5/08	Metals	Chromium	0.0044	mg/L	J	
			SW-SA2-GMCS-5-DUP	9/5/08	Metals	Cobalt	0.0023	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Copper	0.0049	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Copper (Dissolved)	0.0031	mg/L	J	
			SW-SA2-GMCS-5-DUP	9/5/08	Metals	lron	3.1	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Lead	0.0027	mg/L	J	
1	1		SW-SA2-GMCS-5-DUP	9/5/08	Metals	Magnesium	25	mg/L		
1			SW-SA2-GMCS-5-DUP	9/5/08	Metals	Magnesium (Dissolved)	22	mg/L		
1			SW-SA2-GMCS-5-DUP	9/5/08	Metals	Manganese	0.23	mg/L		
			SW-SA2-GMCS-5-DUP	9/5/08	Metals	Nickel	0.0053	mg/L	J	
L			SW-SA2-GMCS-5-DUP	9/5/08	Metals	Nickel (Dissolved)	0.0057	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Potassium	4.1	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Potassium (Dissolved)	3.3	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Sodium	24	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Sodium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Vanadium	0.011	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Vanadium (Dissolved)	0.003	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Zinc	0.02	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Bromomethane	33	ug/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Toluene	0.53	ug/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Phosphine oxide, triphenyl-	23	ug/L	TJN	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Aluminum	3.3	mg/L		٦
		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Arsenic	0.0036	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Barium	0.12	mg/L		
		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Barium (Dissolved)	0.077	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Calcium	56	mg/L		
		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Calcium (Dissolved)	50	mg/L	В	
		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Chromium	0.0044	mg/L	J	
		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Cobalt	0.0021	mg/L	J	
		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Copper	0.0047	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Iron	3.4	mg/L		J

				Sample		***			Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Magnesium	26	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Manganese	0.24	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Nickel	0.0041	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Nickel (Dissolved)	0.0026	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Potassium	4.4	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Potassium (Dissolved)	3.5	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Sodium	28	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Sodium (Dissolved)	26	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Vanadium	0.011	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Vanadium (Dissolved)	0.0031	mg/L	j	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Zinc	0.019	mg/L	J	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Benzene	3.3	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Chlorobenzene	120	ug/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	1,1-Dichloro-2,2-bis(p- chlorophenyl)etha	490	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	1,4-Dichlorobenzene	130	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2-Methylnaphthalene	26	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Acenaphthene	27	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Anthracene	52	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(a)anthracene	95	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(a)pyrene	55	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(b)fluoranthene	81	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(g,h,i)perylene	45	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Chrysene	160	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Diphenyl sulfone	640	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Docosane	630	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Eicosane, 10-methyl-	610	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Fluoranthene	150	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Fluorene	65	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Heneicosane	270	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Heptadecane	510	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Hexatriacontane	300	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Nonadecane	320	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Phenanthrene	250	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Pyrene	170	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Squalane	290	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Tetradecane	380	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Tridecane, 1-iodo-	310	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Tridecane, 6-propyl-	620	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides	4,4'-DDD	1700	ug/Kg	D	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides		30	ug/Kg	Р	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides	4,4'-DDT	1300	ug/Kg	D	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Aluminum	14000	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Antimony	0.47	mg/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		Arsenic	9.5	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Barium	520	mg/Kg		

Sauget Area 2

Groundwater Migration Control System Sediment Sample Detections September 2008

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Beryllium	0.69	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Cadmium	0.62	mg/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Calcium	10000	mg/Kg	В	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Chromium	21	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Cobalt	7.4	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Copper	90	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Iron	18000	mg/Kg	В	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Lead	16	mg/Kg	В	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Magnesium	5400	mg/Kg	В	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Manganese	550	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Mercury	0.035	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Nickel	20	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Potassium	2200	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Selenium	1.3	mg/Kg	Ĵ	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Sodium	170	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Vanadium	40	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Zinc	180	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Chlorobenzene	0.99	ug/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Chloroform	1.6	ug/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	bis(2-Ethylhexyl)phthalate	140	ug/Kg	JB	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Hexanedioic acid, bis(2- ethylhexyl) este	180	ug/Kg	TJN	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Aluminum	880	mg/Kg		
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Arsenic	2.6	mg/Kg		
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Barium	16	mg/Kg		
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Beryllium	0.066	mg/Kg	J	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Cadmium	0.17	mg/Kg	J	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Calcium	840	mg/Kg	В	
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Chromium	1.8	mg/Kg		
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08 9/4/08	Metals	Copalt	2.7 3.9	mg/Kg mg/Kg		
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3 SED-SA2-GMCS-3	9/4/08	Metals Metals	Copper Iron	3300	mg/Kg	В	
Sediment Sediment		Station 3 - PDA3 Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Lead	3300	mg/Kg	В	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Magnesium	500	mg/Kg	В	
Sediment	1	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Manganese	71	mg/Kg		
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Sauget Area 2

Groundwater Migration Control System Sediment Sample Detections September 2008

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Nickel	5.8	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Potassium	160	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Selenium	0.28	mg/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Vanadium	3.5	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Zinc	52	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Chloroform	0.84	ug/Kg	J	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Hexanedioic acid, bis(2- ethylhexyl) este	150	ug/Kg	TJN	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Aluminum	1200	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Arsenic	1.8	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Barium	15	mg/Kg		
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Beryllium	0.074	mg/Kg	J	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Calcium	760	mg/Kg	В	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Chromium	2.9	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Cobalt	2.6	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Copper	1.8	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Iron	3700	mg/Kg	В	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Lead	2.3	mg/Kg	В	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Magnesium	630	mg/Kg	В	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Manganese	63	mg/Kg		
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Nickel	5.8	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Potassium	150	mg/Kg		
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Sodium	90	mg/Kg	J	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Vanadium	4.5	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Zinc	9.8	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Carbon Disulfide	1.8	ug/Kg	J	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Chloroform	0.79	ug/Kg	J	
Sediment	.1	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Aluminum	680	mg/Kg		
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Arsenic	2	mg/Kg		
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Barium	18	mg/Kg		
Sediment			SED-SA2-GMCS-5	9/5/08	Metals	Beryllium	0.07	mg/Kg	J	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Calcium	590	mg/Kg	В	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Chromium	1.9	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Cobalt	1.9	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Copper	1.7	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Iron	3200	mg/Kg	В	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Lead	4	mg/Kg	В	

Sauget Area 2 Groundwater Migration Control System Sediment Sample Detections

September 2008

	1			Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Magnesium	360	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Manganese	95	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Nickel	3.4	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Potassium	140	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Vanadium	3.3	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Zinc	8.8	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08		Benzene	4.2	ug/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	VOCs	Chloroform	0.71	ug/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Aluminum	780	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Arsenic	1.4	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Barium	13	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Beryllium	0.092	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Calcium	750	mg/Kg	В	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Chromium	2.8	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Cobalt	2.1	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Copper	4.2	mg/Kg		
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Iron	3700	mg/Kg	В	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Lead	4.5	mg/Kg	В	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Magnesium	580	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Manganese	85	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Nickel	4.8	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Potassium	97	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Vanadium	2.7	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-	9/5/08	Metals	Zinc	10	mg/Kg		
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	Chloroform	0.98	ug/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	Dichlorprop	3.4	ug/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Aluminum	770	mg/Kg		J
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Arsenic	2.2	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Barium	20	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Beryllium	0.082	mg/Kg	J	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Calcium	430	mg/Kg	В	J
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Chromium	1.6	mg/Kg		
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Cobalt	2.3	mg/Kg		
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Copper	0.7	mg/Kg	J	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Iron	3800	mg/Kg	В	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Lead	2.7	mg/Kg	В	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Magnesium	370	mg/Kg		J
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Manganese	110	mg/Kg		J

Sauget Area 2

Groundwater Migration Control System Sediment Sample Detections September 2008

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Nickel	4.8	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Potassium	160	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Vanadium	4.1	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Zinc	7.5	mg/Kg		



Sample Summary List

Sauget Area 2

Groundwater Migration Control System SAS056 and SAS057 Sample Summary List

September 2008

		Sample								
SDG	Sample ID	Date	VOCs	SVOCs	PCBs	Pesticides	Herbicides	Dioxins	Metals	Other
SAS056	SW-SA2-GMCS-STATION 2	9/4/08	X	X		X	X			
SAS056	SW-SA2-GMCS-STATION 3	9/4/08	X	X		X	X		X	
SAS056	SW-SA2-GMCS-STATION 4	9/4/08	X	X		X	X		X	
SAS056	SW-SA2-GMCS-STATION 5	9/5/08	X	X		X	Х		X	
SAS056	SW-SA2-GMCS-STATION 9	9/5/08	X	Х		Х	X		Х	
SAS057	SED-SA2-GMCS-STATION 3	9/4/08	Х	X		X	Χ		Х	
SAS057	SED-SA2-GMCS-STATION 4	9/4/08	X	X		X	Х		X	
SAS057	SED-SA2-GMCS-STATION 5	9/5/08	X	Х		X	Х		Χ	
SAS057	SED-SA2-GMCS-STATION 9	9/5/08	X	Х		X	X		X	

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Checklists

DATA VALIDATION WORKSHEET VOLATILE ORGANIC ANALYSIS

 Reviewer:
 Tony Sedlacek

 Date:
 1/2/2009

 Laboratory
 Severn Trent Laboratory - Savannah

Major Anomalies:

No data was rejected.

Minor Anomalies:

Analytes were qualified using professional judgment and due to field duplicate RPD.

Field IDs:

SW-SA2-GMCS-2

SW-SA2-GMCS-9

TB-090508

SW-SA2-GMCS-3 SW-SA2-GMCS-4 SW-SA2-GMCS-5 SW-SA2-GMCS-5-DUP SED-SA2-GMCS-5-EB

1.0 Chain of Custody/Sample Condition

TB-090408

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt,			
	condition of samples, analytical problems or special circumstances affecting the quality of the data?	x	60.00	

Note:

Although not indicated in the laboratory case narrative, analytes were detected in the equipment blank and professional judgment was used to qualify common laboratory contaminant methyl ethyl ketone. Also, bromomethane was qualified due to field duplicate RPD. MS/MSD recoveries were outside evaluation criteria in sample SW-SA2-GMCS-9. The cooler receipt form indicated that sample containers were received by the laboratory broken. The analysis were not specified, however adequate sample volume was available to complete all requested analysis.

Field ID	Analyte	New RL	Qualification
SW-SA2-GMCS-3	Methyl ethyl ketone	_	υ
SW-SA2-GMCS-4	Methyl ethyl ketone	-	U
SW-SA2-GMCS-5	Methyl ethyl ketone	-	U
SW-SA2-GMCS-5-DUP	Methyl ethyl ketone	-	U

2.0 Holding Time/ Preservation (Code H)

					Yes	No	NA
2.1	Do sample preservat	ion, collection and stora	age condition meet met	hod requirement?	х		
	unpreserved or temp	erature is outside the ra	nge 0° (but not frozen)	<2° >6°C, etc.), comment in report to 10° flag all positive results wit tive detections "J" and non-detects	ha		
2.2	Have any technical h J(+)/UJ(-).	olding times, determine	ed from sampling to da	te of analysis, been exceeded? If y	/es,	х	
	Matrix	Preserved	Aromatic	All others			
	Aqueous	No	7 days	14 days			
		Yes	14 days	14 days			
	Soil/Sediment	4 °C ± 2 °C	14 days	14 days			
2.3	Have any technical h	olding times been gross	sly (twice the holding t	me) exceeded? If yes, J(+)/R(-).		X	

Note:

All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.I	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?			х
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			х
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			x

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

,			x x x	No	NA
	4.1	Is a Method Blank Summary form present for each batch?	X		
	4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?	Х		
	4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?		X	
		Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated to the RL for estimate (laboratory "J" flagged) concentrations.			
	4.4	If Level IV, review raw data and verify all detections for blanks were reported.			х

Note: The compounds bromomethane (16 µg/L) and toluene (1.0 µg/L) were detected in equipment blank SED-SA2-GMCS-5-EB. This sample was included as part of this SDG but was associated with the samples from SDG SAS057. These detections will be discussed further in the blank section in SDG057.

5.0 GC/MS Initial Calibration (Code C)

	Yes	No	NA
Are Initial Calibration summary forms present and complete for each instrument used?	300000		Х
Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			х
If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01			
for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			X
Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.	40.00.00		Х
If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			х
	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990? If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R". Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-). Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.	Are Initial Calibration summary forms present and complete for each instrument used? Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990? If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R". Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-). Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.	Are Initial Calibration summary forms present and complete for each instrument used? Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990? If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R". Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-). Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			х
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			х
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			х
	If yes, a marginal increase in response >20% then $J(+)$ only; a decrease in response then $J(+)$ / $UJ(-)$. For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, $J(+)/R(-)$.			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			х

Note:

7.0 Surrogate Recovery (Code S)

					Yes	No	NA
7.1	Are all sampl	es listed on the app	propriate Surrogate Recovery Sun	nmary Form ?	X		
7.2	Are surrogate	recoveries within	acceptance criteria specified in the	ne QAPP for all samples?	x		
7.3	If No in Secti	on 7.2, were these	sample(s) or method blank(s) rea	nalyzed?			х
7.4	1 .	on 7.3, is any sam	ple dilution factor greater than 10	? (Surrogate recoveries m	ay be diluted	***************************************	
	out.) Note: If SMO Positive Non-detect	C recoveries do not > UCL J None	meet acceptance criteria in samp 10% to LCL J	oles chosen for the MS/MS < 10% J R	D or diluted	_1	<u> </u>

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

			Yes	No	NA
	8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x	_	
	8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate			
	0.2	per twenty for each matrix?	х		
	8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		X	
		Using informed professional judgment, the data reviewer should use the MS and MSD results in			
		conjunction with other QC criteria and determine the need for qualification of the data for samples from			
L		the same site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note:

Sample SW-SA2-GMCS-9 was spiked and analyzed for VOCs. The MS/MSD recoveries for chloromethane (150/168%) with criteria (48-142%) and chloroethane (213/245%) with criteria (40-165%) were outside evaluation criteria in sample SW-SA2-GMCS-9. USEPA National Functional Guidelines for Organic Data Review indicates that organic data should not be qualified based on MS/MSD data alone and LCS recoveries were within evaluation criteria, therefore no qualification of the data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

			Yes	No	NA
	9.1	Is an LCS recovery form present?	x		
	9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	x		
	9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?	x		
	9.4	If Level IV, verify the % recoveries are calculated correctly.			X
		Action for specific compound outside the acceptance criteria: %R>UCL,			
L		J(+) only; <lcl, "j"="" (+="" <30%="" be="" failures="" flagged="" j(+)="" only)<="" r(-).="" rpd="" should="" td="" uj(-);=""><td></td><td></td><td></td></lcl,>			

Note: All LCS recoveries were within evaluation criteria.

10.0 Internal Standards (Code I)

					Yes	No	NA
10.1	Are internal stands	ard areas for every sample a	and blank within upper and le	ower QC limits?	X		
		Area > +100%	Area < -50%	Area < -10%			
	Positive Non-detect Note: calibration, not sam sample, using inform this case. 10.2 Are retention times Action: The chrominal part of the chrominal part	Ј	J	J	1		
	Non-detect	None	UJ	R			
Note:	sample, using info			ecifications are met for a given not to flag individual samples in			
10.2	Are retention time	s of internal standards with	in 30 seconds of the associat	ed calibration standard?	х		
				ositives or negatives exist. For			
	shift of a large ma	gnitude, the reviewer may o	consider partial or total reject	ion of the data for non-detects			
	in that sample/frac	tion.					

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Id	11.0 TCL Identification (Code W)					
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard					
	RRT in the continuing calibration?			X		
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample					
	mass spectrum; and do sample and standard relative ion intensities agree within 30%?			X		

Note:

12.0 TCL/	Yes	No	NA	
12.1	Are RLs used consistent with those specified in the QAPP?	0.00000		х
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?	0.40000		X
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			X
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			X
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			х
Note:				

13.0 Field I	Yes	No	NA	
13.1	Were any field duplicates submitted for VOC analysis?	x		
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?		Х	
	Action: No qualifying action is taken based on field duplicate results, however the data validator should			
	provide a qualitative assessment in the data validation report.			

Sample SW-SA2-GMCA-5-DUP was a duplicate of sample SW-SA2-GMCS-5 and was analyzed for VOCs. The RPD for bromomethane (57%) was outside evaluation criteria (<25%). Bromomethane was detected and qualified estimated (J) in samples SW-SA2-GMCS-5 and SW-SA2-GMCS-5-DUP.

14.0 Data Completeness

		Yes	No	NA
14	.1 Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqu	ieous 💢	200	
14	.2 Number of samples: 9			
14	.3 Number of target compounds in each analysis: 35			
14				
	% Completeness = $100 \times ((14.1 \times 14.2) - 14.3) / (14.1 \times 14.2)$			
	% Completeness 100			

Note:

DATA VALIDATION WORKSHEET SEMIVOLATILE ORGANIC ANALYSIS

Reviewer:	Tony Sedlacek		Project Name:	Sai	uget - Area 2	Site R GMCS
Date:	1/2/2009		Project Number:	21561993.00001 SAS056		3.00001
Laboratory	Laboratory Severn Trent Laboratory - Savannah		SDG No.:)56	
			Review Level:		Level	III
Major Anom	alies:					
	No data was rejected.					
Minor Anoma	alies:					
	No analytes required qualification based on th	is data review.		······		
Field IDs:	SW-SA2-GMCS-2	SW-SA2-GMCS-9	SED-SA2-GMCS-5-EB			
	SW-SA2-GMCS-3	SW-SA2-GMCS-5				
	SW-SA2-GMCS-4	SW-SA2-GMCS-5-DUP				
1.0 Chain of	Custody/Sample Condition			Yes	No	NA
1.1	Do Chain-of-Custody forms list all sar	nples analyzed?		X		
1.2	Are all Chain-of-Custody forms signed	l, indicating sample chain-of-	custody was maintained?	х		
1.3	Do the Traffic Reports, chain-of-custo	dy, and lab narrative indicate	any problems with sample receipt,			
	condition of samples, analytical proble	ms or special circumstances	affecting the quality of the data?	x		
Note:	The laboratory case narrative indicated that the	e surrogate recovery for 2-Fluorobij	ohenyl was outside evaluation criteria. The cooler	receipt form	indicated	
	that sample containers were received by the la	boratory broken. The analysis were	not specified, however adequate sample volume w	as available	to .	
	complete all requested analysis.					
2.0 Holding	Time/ Preservation (Code H)			Yes	No	NA
2.1	Do sample preservation, collection and	l storage condition meet meth	od requirement?	X		
	If samples were not on ice or the ice w	as melted upon arrival at the	aboratory and the temperature of the			
	cooler was elevated (> 10 °C), then fla					
2.2	Have any technical holding times, dete	rmined from sampling to date	of analysis, been exceeded? (See		Х	
	Extraction: Soil/Sediment 14 days - ac					:
2.3	Have any technical holding times gros	sly (twice the holding time) b	een exceeded? If yes, J(+)/R(-).		Х	
Note:	All holding times criteria were met.					
3.0 GC/MS I	Instrument Performance Check (Cod	e T)		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibra	tion forms present for DFTPP	?			х
3.2	Have all samples been analyzed within					х
	If no, the data for the affected standard		C samples are rejected "R".			
3.3	Have ion abundance criteria for DFTP					Х
	If no, all standards, blanks, field samp	les and QC samples are reject	ed "R".			
Note:						

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?	X		•
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?		X	
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?		x	
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be			
	qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4,4	If Level IV, review raw data and verify all detections for blanks were reported.			Х
Note:	All blank criteria were met			

All blank criteria were met.

5.0 GC/M	S Initial Calibration (Code C)	Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			х
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?			X
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			Х
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, $J(+)/R(-)$.			X
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.	10000		X
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

6.0 Contin	uing Calibration (Code C)	Yes	No	ŇA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			X
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.	0.00		х
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, $J(+)/R(-)$.			X
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.		•	х

Note:

0 Surrog	ate Recovery (C	Code S)				Yes	No	NA
7.1	Are all samp	les listed on the ap	propriate Surrogate Recovery	Summary Form ?		X		
7.2		surrogate recoveries within acceptance criteria specified in the QAPP for all samples and method blanks						
7.3	Are more that	Are more than one of either fraction outside the acceptance criteria?						
7.4	If Yes in Sect	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?						Х
7.5	If Yes in Sect	ion 7.3, is any san	nple dilution factor greater that	n 10?				X
			y unacceptable recoveries in the and base/ neutrals are assessed		s, then no			
		> UCL	10% to LCL	< 10%				
	Positive	J	J	J				
	Non-detect	None	UJ	R				

Note:

The surrogate recovery for 2-fluorobiphenyl (44%) was outside evaluation criteria (50-113%) in sample SW-SA2-GMCS-3. Since only one base fraction surrogate was outside criteria in samples SW-SA2-GMCS-3 and National Functional Guidelines indicates to qualify data if two or more surrogates per SVOC fraction are outside criteria; therefore, no qualification of the SVOC data was required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

			Yes	No	NA
	8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x		
	8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?	X		
	8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?			
1		Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction			
		with other QC criteria and determine the need for qualification of the data for samples from the same			
		site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SW-SA2-GMCS-9 was spiked and analyzed for SVOCs. All MS/MSD recoveries were within evaluation criteria.

9.0 Labora	ttory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)	Yes	No	NA
9.1	Is an LCS recovery form present?	x		
9.2	Is LCS analyzed at the required frequency for each matrix?	Х		
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?	X		
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <lcl, <30%<="" j(+)="" td="" uj(-);=""><td></td><td></td><td></td></lcl,>			
	J(+)/R(-). RPD failures should be flagged "J" (+ only)			
9.4	If Level IV, verify the % recoveries are calculated correctly.			X

Note: All LCS recoveries were within evaluation criteria.

10.0 Interna	al Standards (Cod	le I)			Yes	No	NA
10.1	Are internal stan	dard area of every sample an	ing 🗓 🗓				
	Area > +100% Area < -50% Area < -10%						
	Positive	l	J	J			
	Non-detect	None	UJ	R			
Note:							
	not sample to con	ification is for the continuing ntinuing calibration. Thus, if ional judgment, the reviewer	· I				
10.2		es of internal standards with	<u> </u>		x		
	Action: The chr	omatogram must be examine	d to determine if any false p	ositives or negatives exist. For	shift		
	of a large magnit	ude, the reviewer may consid	at				
	sample/fraction.						

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Id	1.0 TCL Identification (Code W)			NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in			
	the continuing calibration?			X
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample mass			
	spectrum; and do sample and standard relative ion intensities agree within 30%?	0.000		X

Note:

12.0 TCL/T	IC Quantitation and Reported Detection limits (Code K)	Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			х
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			Х
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			х
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			X
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			X

Note:

_1	3.0 Field Duplicate Samples (Code F)			No	NA
	13.1	Were any field duplicates submitted for SVOC analysis?	X		
	13.2	Were all RPD or absolute difference values within the control limits?	X		
Γ		No action is taken based on field duplicate results, however the data validator should provide a qualitative			
L		assessment in the data validation report.			

Note: Sample SW-SA2-GMCA-5-DUP was a duplicate of sample SW-SA2-GMCS-5 and was analyzed for SVOCs. All evaluation criteria were met.

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample,				
14.2	Number of samples:	7			
14.3	Number of target compounds in each analysis:	65			
14.4	Number of results rejected and not reported:	0			
	% Completeness = $100 \times ((14.1 \times 14.2) - 14.3) / (14.1 \times 14.2)$				
	% Completeness	100			

Note:

DATA VALIDATION WORKSHEET PESTICIDES ANALYSIS

Reviewer:	Tony Sedlacek Project Name			
Date:	1/2/2009 Project Number:	: 2	001	
Laboratory	Severn Trent Laboratory - Savannah SDG No.	:		
	Review Level	;	Level III	
Major Anom	alies:			
	No data was rejected.			
Minor Anom	alies:			
	No analytes required qualification based on this data review.			
Field IDs:	SW-SA2-GMCS-2 SW-SA2-GMCS-9 SED-SA2-GMCS-5-EB			
	SW-SA2-GMCS-3 SW-SA2-GMCS-5			
	SW-SA2-GMCS-4 SW-SA2-GMCS-5-DUP			
1.0 Chain of	Custody/Sample Condition			X1.1
		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of			
	samples, analytical problems or special circumstances affecting the quality of the data?	X	8.00	
Note:	The laboratory case narrative indicated that the MS/MSD RPD for alpha-BHC was outside evaluation criteria. The cooler receipt form indicated	ated		
	that sample containers were received by the laboratory broken. The analysis were not specified, however adequate sample volume was available.	able to		
	complete all requested analysis.			
2 ft Holding	Fime/ Preservation (Code h)	Yes	No	NA
2.1		58000980800000880		
2.1	Do sample preservation, collection and storage condition meet method requirement?	X	i	
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler was			
	elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached			
	Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		x	
		[
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days	ļ		
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		x	
Note:	All holding times criteria were met.			
3.0 Blanks (Method Blanks and Field Blanks)			
	(Code x - Field Blank Contamination, Code z - Method blank contamination)			
	,	Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?	х	Ì	
3.2	Do any method blanks have positive results (TCL)?		¥	
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?	T	X	
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated			
	to the RL for estimate (laboratory "J" flagged) concentrations.			
3.4	If Level IV, review raw data and verify all detections for blanks were reported.	1		X
Note:	All blank criteria were met.	,,	<u>.</u>	

4.0 GC/E	CD Instrument Performance Check (Code b)	Yes	No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?			Х
4.2	Have all samples been analyzed within twelve hours of the performance check sample?			х
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?		·	х
	If no, all standards, blanks, field samples and QC samples are rejected "R".			

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			Х
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument	100000000000000000000000000000000000000		Х
	If not, J(+)/UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			X

Note:

6.0 Continuing Calibration (Code c)

 		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?	0.000		х
6.2	Has a continuing calibration standard been analyzed every 12 hours?			х
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then $J(+)$ only; a decrease in response then $J(+)$ / $UJ(-)$. For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			X

Note:

7.0 Surrogate Recovery (Code s)

						Yes	No	NA
7.1	Are all sampl	es listed on the app	propriate Surrogate Recovery Sur	mmary Form ?		x		
7.2	Are surrogate	Are surrogate recoveries within acceptance criteria specified in the QAPP for all samples?				x		
7.3	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?							х
7.4	If No in Section 7.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)							X
		> UCL	10% to LCL	< 10%				
	Positive	J	J	J				
	Non-detect	None	UJ	R				

Note:

All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	x		
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	x		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		х	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples from the same site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note:

Sample SW-SA2-GMCS-9 was spiked and analyzed for pesticides. The MS/MSD RPD for alpha-BHC (64) was outside evaluation criteria (40) in sample SW-SA2-GMCS-9. USEPA National Functional Guidelines for Organic Data Review indicates that organic data should not be qualified based on MS/MSD data alone and LCS recoveries were within evaluation criteria, therefore no qualification of the data was required. In addition, samples are not qualified if the RPD was outside evaluation criteria and both MS/MSD recoveries were within evaluation criteria.

9.0 Laboratory Control Sample (LCS/LCSD) (Code 1 - LCS recovery Code e - RPD)

	Rolly Control Sample (Dest Dest) (Code 1 - Dest recovery Code C - Rib)	Yes	No	NA
9.1	Is an LCS recovery form present?	X		
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?	X		
9.4	If Level IV, verify the % recoveries are calculated correctly.			X
	Action for specific compound outside the acceptance criteria: %R>UCL,			
	J(+) only; <lcl, "j"="" (+="" <30%="" be="" failures="" flagged="" j(+)="" only)<="" r(-).="" rpd="" should="" td="" uj(-);=""><td></td><td></td><td></td></lcl,>			

Note: All LCS recoveries were within evaluation criteria.

10.0 TCL Id	lentification (Code w)	Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the			
	continuing calibration?			ХХ

Note:

.0 TCL 0	Quantitation and Reported Detection limits (Code p)	Yes No	NA
11.1	Are RLs used consistent with those specified in the QAPP?		х
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?		Х
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".		х
11.4	If Level IV, calculate a sample of positive results to verify correct calculations		X
Note:			

12.0 Field	Duplicate Samples (Code f)	Yes	No	NA
12.1	Were any field duplicates submitted for analysis?	X		
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	X		
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a			
	qualitative assessment in the data validation report.	Į		

Note: Sample SW-SA2-GMCA-5-DUP was a duplicate of sample SW-SA2-GMCS-5 and was analyzed for pesticides. All evaluation criteria were met.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP of	r use 95% for aqueous sample, 90% fo	г х		
13.2	Number of samples:	7			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = $100 \times ((13.1 \times 13.2) - 13.3) / (13.1 \times 13.2)$				
	% Completeness	100			

Note:

DATA VALIDATION WORKSHEET HERBICIDES ANALYSIS

Reviewer:	Tony Sedlacek	Project Name:	Sauget	Area 2 Site I	R GMCS
Date:	1/2/2009	Project Number:	21	561993.0000	01
	Severn Trent Laboratory - Savannal	SDG No.		SAS056	
	***************************************	Review Level	:	Level III	
Major Anom	alies:				
	No data was rejected.				
				·····	
Minor Anom	alies:				
	No analytes required qualification b	ased on this data review.			
Field IDs:	SW-SA2-GMCS-2	SW-SA2-GMCS-9 SED-SA2-GMCS-5-EB			
	SW-SA2-GMCS-3	SW-SA2-GMCS-5			
	SW-SA2-GMCS-4	SW-SA2-GMCS-5-DUP			
10 00 4	C				
1.0 Chain of	Custody/Sample Condition		Yes	No	NA
1.1	Do Chain-of-Custody forms l	ist all samples analyzed?	x		
1.2		ms signed, indicating sample chain-of-custody was maintained?	x		
1.3		-of-custody, and lab narrative indicate any problems with sample receipt, condition of			
		or special circumstances affecting the quality of the data?	x		
Note:	The laboratory case narrative did no	ot indicate any problems. The cooler receipt form indicated that sample containers were received by the l	aboratory bro	ken.	
	The analysis were not specified, ho	wever adequate sample volume was available to complete all requested analysis.			
4 0 - 13 - 130 1			·		
2.0 Holding	Time/ Preservation (Code h)		Yes	No	NA
2 1	De complemention colle	ation and stances and litian most mathed requirement?	X		
2.1	If camples were not on ice or	ection and storage condition meet method requirement? the ice was melted upon arrival at the laboratory and the temperature of the cooler was	A	<u> </u>	
		all positive results with a "J" and all non-detects "UJ".			
2,2		mes, determined from sampling to date of analysis, been exceeded? (See attached	- 		
2.2	1 '	thes, determined from sampling to date of analysis, over exceeded? (see attached sole holding time). If yes, J(+)/UJ(-).		x	
	Troiding Time Table for Sump	nothing times in you, and it	1	[:e0::0::7:0::0:0:0:4	***************************************
	Extraction: Soil/Sediment 14	days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding ti	mes grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		х	
Note:	All holding time criteria were met.				
3.0 Blanks (Method Blanks and Field Bl	anks)			
210 2101111 (,	(Code x - Field Blank Contamination, Code z - Method blank contamination)			
		, , , , , , , , , , , , , , , , , , ,	Yes	No	NA
3.1	Is a Method Blank Summary	form present for each batch?	X		
3.2	Do any method blanks have p	oositive results?		X	
3.3	Do any field/rinse/equipment			X	L
	1	ts <5X the blank concentration should be qualified "U". The result should be elevated to			
		ry "J" flagged) concentrations.	<u> </u>	,	
3.4	If Level IV, review raw data	and verify all detections for blanks were reported.			X
Note:	All blank criteria were met.				

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?	10.00		x
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			х
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			X

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			х
5.2	Has a continuing calibration standard been analyzed every 12 hours?			x
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			X
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.	<u> </u>		x

Note:

6.0 Surrogate Recovery (Code s)

					Yes	No	NA.
6.1	Are all sampl	es listed on the app	propriate Surrogate Recovery Su	ımınary Form ?	X		
6.2	Are surrogate	recoveries within	acceptance criteria specified in	the QAPP for all samples?	x		
6.3	If No in Secti	on 6.2, were these	sample(s) or method blank(s) re	eanalyzed?			Х
6.4							
	If No in Secti	ion 6.3, is any sam	ple dilution factor greater than	0? (Surrogate recoveries may be diluted out.)			<u> x</u>
		> UCL	10% to LCL	< 10%			
	Positive	J	J	Ĵ			
	Non-detect	None	UJ	R			

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
7,2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	х		
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?	X		
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples from the same site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SW-SA2-GMCS-9 was spiked and analyzed for herbicides. All MS/MSD evaluation criteria were met.

8.0 Laboratory Control Sample (LCS/LCSD) (Code i - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?	X		
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?	X		
8.4	If Level IV, verify the % recoveries are calculated correctly.			х
	Action for specific compound outside the acceptance criteria: %R>UCL,			
	J(+) only; <lcl, "j"="" (+="" <30%="" be="" failures="" flagged="" j(+)="" only)<="" r(-).="" rpd="" should="" td="" uj(-);=""><td></td><td></td><td></td></lcl,>			

Note: All LCS recoveries were within evaluation criteria.

.0 TCL Id	entification (Code w)	Yes	No	NA
9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?			X
Note:				
0.0 TCL (Quantitation and Reported Detection limits (Code p)	Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?		***	х
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?		<u></u>	X
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			<u>x</u>
10.4	If Level IV, calculate a sample of positive results to verify correct calculations			Х
Note:				
		Yes	No	NA
1.0 Field	Duplicate Samples (Code 1)	1 03	1	
	Duplicate Samples (Code f) Were any field duplicates submitted for herbicide analysis?	X		
11.1 11.2	Were any field duplicates submitted for herbicide analysis? Were all RPD or absolute difference values within the control limits outlined in the QAPP?			

Note: Sample SW-SA2-GMCA-5-DUP was a duplicate of sample SW-SA2-GMCS-5 and was analyzed for pesticides. All evaluation criteria were met.

12.0 Data Completeness

qualitative assessment in the data validation report.

		Yes	No	NA.
Is % completeness within the control limits? (Control limit: Check QAPP or	use 95% for aqueous sample, 90% for	x		
Number of samples:	7	_		
Number of target compounds in each analysis:	10	╛		
Number of results rejected and not reported:	0			
% Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)				
% Completeness	100	<u> </u>		
	Number of samples: Number of target compounds in each analysis: Number of results rejected and not reported: % Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)	Number of target compounds in each analysis: Number of results rejected and not reported: % Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)	Number of samples: 7 Number of target compounds in each analysis: 10 Number of results rejected and not reported: 0 % Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)	Is % completeness within the control limits? (Control limit: Check QAPP or use 95% for aqueous sample, 90% for Number of samples: Number of target compounds in each analysis: Number of results rejected and not reported: % Completeness = 100 x ((12.1 x 12.2) - 12.3) / (12.1 x 12.2)

Note:

DATA VALIDATION WORKSHEET - Level III Review Inorganic - ICP, ICP-MS, GFAA, and CVAA

Tony Sedlacek

Date:	1/2/2009	_	Pı	roject N	lumb	er:_	2	.00001	[
Laboratory	Severn Trent Laboratory - Savannah	_		SI	DG N	lo.: _	SAS05	56		
•		_		Review	v Lev	vel:	Level	II		
Major Anomalies:										
•	No data was rejected.									
Minor Anomalies:										
	Analytes were qualified due to analytes detected high MS/MSD recoveries.									
	7.7.7.7	•								
Field IDs:	SW-SA2-GMCS-2 SW-SA2-GMCS-9 SED-SA2-GMCS-5-EB									
	SW-SA2-GMCS-3 SW-SA2-GMCS-5									
	SW-SA2-GMCS-4 SW-SA2-GMCS-5-DUP									
1.0 Chain of Custo	dy/Sample Condition/Raw Data		ICP		CP-M		GFA		VAA-	Hg
	•	Yes	No N	A Yes	No	NA	Yes No	NA Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	x						х		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was main	n x				200000		x		
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems					ſ				
	with sample receipt, condition of samples, analytical problems or special									
	circumstances affecting the quality of the data?	х							X	
1.4										
	Does sample preservation, collection and storage meet method requirement? (water	r								
	samples: with Nitric Acid to pH < 2, and soil/sediment samples: $4^{\circ}C \pm 2^{\circ}C$)	х	1					X		
1.5	Are the digestion logs present and complete with pH values, sample weights.					5				
	dilutions, final volumes. % solids (for soil samples), and preparation dates? For any					1000000				
	missing or incomplete documentation, contact the laboratory for	2550V2555000				1000				
	explanation/resubmittal.			x						x
Note:	The laboratory case narrative indicated that the MS/MSD recoveries were outside evaluation criteria.	In additi	on, ana	alytes we	e dete	cted in	n the equip	ment blanl	(
	and method blank. The cooler receipt did not indicate any problems for metals samples.									
2.0 Holding Time ((Code h)		ICP	To	CP-M	1S	GFA	A C	VAA-	Нg
2.0 Holding Time (code 1)							NA Yes		NA
2.1	Have any technical holding times, determined from date of collection to date of	+ + +		T						·
	analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached	1 1								
	Holding Time Table.		x						X	
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding	g								
	time criteria)									
	J(+)/R(-).									
Note:	All samples were analyzed within holding time criteria.									

Project Name: Sauget - Area 2 Site R GMCS

Reviewer:

Instrument	Calibration (Code c) ICP ICP-MS GFAA CVAA-Hg	
		NΑ
3.1	Are sufficient standards included in the calibration curve? (ICP/ICP-MS: blank + one standard; GFAA: blank + three standards; CVAA: blank + five standards)	
3.2	Are the correlation coefficients > 0.995? (for GFAA and CVAA) Action: J(+)/UJ(-).	X
3.3	Was an initial calibration verification (ICV) analyzed at the beginning of each analysis? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.	X
3.4	Was continuing calibration verification (CCV) performed every 10 analysis or every 2 hours, whichever is more frequent? Action: If no, use professional judgment to determine affect on the data and note in reviewer narrative.	x
3.5	Are all calibration standard percent recoveries (ICV and CCV) within the control limits? Mercury (80%-120%) and other Metals (90%-110%). Action: R(+/-) J(+)/UJ(-) J(+) R(+) Mercury < 65% 65% - 79% 121% - 135% > 135% Other Metals < 75% 75% - 89% 111% - 125% > 125%	x

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

			ICI	•	I	CP-N	ИS		FAA			.lg
		Yes	No	NA	Yes	No	NA	Yes	No N	IA Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20											
	samples, per batch, per matrix and per level)?	X		1						Х		
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the							İ				
	blank value are determined for positive and negative blank values.	Х					Ž		0.00		x	
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional											i
	judgment to determine affect on the data note in reviewer narrative.			X						19.00		Х
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every											İ
1	2 hours whichever is more frequent? Action: If no, use professional judgment to											
	determine affect on the data to note in reviewer narrative.			X	0.00							X
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5											
	times the blank value are determined for positive and negative blank values.			x								Х
4.6	Are there samples with concentrations less than five times the highest level in	L	9.3									
	associated blanks? Action: If yes, U at reported concentration.			x	<u> </u>							X
4.7	Are there samples with non-detect results or with concentrations less than five times	3										
	the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).			x	<u> </u>						0,60	X

Note:

The compounds dissolved calcium (0.044 mg/L) and dissolved selenium (0.0061 mg/L) were detected in method blank MB 680-116693/15-B. Total calcium (0.26 mg/L),

total cobalt (0.0014 mg/L), total magnesium (0.044 mg/L) and total zinc (0.0089 mg/L) were detected in the equipment blank SED-SA2-GMCS-5-EB. Also,

dissolved calcium (0.078 mg/L), dissolved magnesium (0.024 mg/L) and dissolved zinc (0.0047 mg/L) were detected in equipment blank SED-SA2-GMCS-5-EB.

This sample was included as part of this SDG but was associated with the samples from SDG SAS057. These detections will be discussed further in the

blank section in SDG057. Analytical data that were reported nondetect or at concentrations greater than five times (5X) the associated blank concentration

did not require qualification.

Field ID	Analyte	Qualification	New RL	Code
SW-SA2-GMCS-5-DUP	Dissolved selenium	Ŭ	-	р

ence Check Sample (ICS) (Code n)	ICP	ICP-MS	GFAA CVAA-Hg
	Yes No NA	Yes No NA	Yes No NA Yes No NA
Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?	x		
Are the ICS AB recoveries within 80% - 120%?	х		
Are the results for unspiked analytes (in ICS A) < + IDL?	X		
level in the ICS? Action: Not Spiked Analytes Spiked analytes (ICS AB analytes)	X		
	and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS? Are the ICS AB recoveries within 80% - 120%? Are the results for unspiked analytes (in ICS A) < + IDL? level in the ICS?	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS? Are the ICS AB recoveries within 80% - 120%? Are the results for unspiked analytes (in ICS A) < + IDL? Level in the ICS? Action: Not Spiked Analytes Spiked analytes (ICS AB analytes)	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS? Are the ICS AB recoveries within 80% - 120%? Are the results for unspiked analytes (in ICS A) < + IDL? Level in the ICS? Action: Not Spiked Analytes Spiked analytes (ICS AB analytes)

J(+)

J(+)/UJ(-)

R(+/-)

Note:

aboratory	Control Sample (LCS) (Code I - Recovery, Code e - RPD) ICP ICP-MS GFAA CVAA-F	
·	Yes No NA Yes No NA Yes No NA Yes No NA Yes No	N/
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+) any sample not associated with LCS results.	
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% - except Ag and Sb; Solid limits: as per EPA-EMSL/LV) Action: Solid Aqueous < LCL > UCL < 50% 50% - 79% > J(+)/UJ(-) J(+) R(+/-) J(+)/UJ(-) J(+)	

Note: All recoveries were within evaluation criteria.

UJ(-)

J(+)

7.0 Laboratory	Duplicates (Code k)		ICP	·	I	CP-N	4S	(3FAA	CV	/AA-)	Нg
	* , , , , , , , , , , , , , , , , , , ,	Yes	No	NA	Yes	No	ΝA	Yes	No N	A Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.		x								x	
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.			x								х
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+).			X								x
	Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.		<u> </u>				<u> </u>					

8.0 Spike Sample	Analysis -Pre-Diges	tion (Code m - Rec	overy, Code d - RPD)			ICP		ICP-			AA	CVAA-	
1	,	•			Yes	No 1	VA Y	es N	o NA	Yes N	lo NA	Yes No	NA
8.1	Was a spiked sam	ple prepared and a	nalyzed at the correct fre	equency (one per 20]
			level)? Action: If no, J(+), with professional									
	19		matrix spike results.		X						ornos.	X	
8.2			MS analysis? Action:	If yes, $J(+)$ with									
		ment. Note in wor				X						X	
			performed on a field blank	when it is the only									
	aqueous sample in	an SDG.			70004003800	90.000	550		26	160	(6)		
8.3	For all analytes v	with sample concen	tration < 4 x spike con-	centration, are spike									
			of 75-125%? (No cont	rol limit applies to								x	
	1 *	entration > 4 x spike				Х						^	
		%R > 125%	30% < %R < 74%	%R < 30%									
	Positive	J	J UJ	J R									
	Non-detect	None			21.00		.1	1 1	-1	C4-4-1	and disco	decad encount	1
Note:			alyzed for total and dissolved m										IIY.
			153%) with criteria 75-125% an										
		***************************************	nan 4X the spike concentrations	did not require evaluation	n or qu	ammea	uon. 1	Anarytic	ai data	mai requ	ineu qua	mication	
	based on MS/MSD da	ta are included in the tab	Field ID			Α,	alyte			Qualifica	ifion	C	ode
		C/W/	-SA2-GMCS-9		100000000000000000000000000000000000000		alumir		S.C. S(2,45(2))	J		reserved and the control of the cont	m
			-SA2-GMCS-9				tal iron			J			m
										1 ~~		~~~	~~
9.0 Instrument De	etection Limits (IDL	<i>.</i>)				ICP		ICP-			AA	CVAA	
					Yes	No.	0.00	es N	o NA	Yes 1	NO NA	Yes No	T
9.1	Are all IDL equal	to or less than the re	eporting limits specified?				X		<u> </u>				X
Note:													
10.0 ICP Serial D	ilutions (Code s)					ICP		ICP-			AA	CVAA	
	,				Yes	No	NA Y	es N	o NA	Yes 1	No NA	Yes No	NA NA
10.1	Were serial dilution	ons performed?			1502-503-		x 🏻						
10.2	Was a five-fold di						x						
10.3	Did the serial dilu	ition results agree w	ithin 10% for analyte con	centration > 50 x the	2								
	IDL in the origina	ıl sample? If no, J(+	·).				х						
Note:													
	~ >					ICP		ICP	MC	C	FAA	CVAA	. U.
11.0 Field Duplic	ate Samples (Code f	()			37.00		NIA S					Yes No	
	Tere a	1	1 10		erde	INO	INA :	1 69 11	NATION	1 (3 1	TOLIVA	eroscopiono.	/ XXA
11.1	Were any field du	plicates submitted for	or metal analysis? control? (For aqueous sa	umnle RPD values <	<u> X</u>		9					X	
	TATE AN HEIG HUD!	icate results withill	common: (non aqueous se	mipro, and values.	188888	3 I	Š		- 1		- 1		
11.2	35% or difference	$x < \pm 2 \times PQL$ and F	or solids, RPD < 50% or o	lifference < ± 4 x	x				<u> </u>		<u> </u>	X	<u> </u>

12.0 Res	sult Verit	fication (Code Q)		ICI	P	ICP-N	1S	GFAA	CVAA-	Hg
			Yes	No	NA	Yes No	NA Yes	No N	IA Yes No	NA
]	12.1	Were all results and detection limits for solid-matrix samples reported on a dry- weight basis?			x					x
	12.2	Were all dilution reflected in the positive results and detection limits?			х					x

13.0 Data Completeness

13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use					
	95% for aqueous sample, 90% for soil sample)					
13.2	Number of samples:	7	0	0	7	
13.3	Number of target compounds in each analysis:	22	0	0	1	
13.4	Number of results rejected and not reported:	0	0	0	0	
	% Completeness = $100 \times ((13.1 \times 13.2) - 13.3) / (13.1 \times 13.2)$					
	% Completeness	100	###	###	100	

DATA VALIDATION WORKSHEET VOLATILE ORGANIC ANALYSIS

Reviewer	: Tony Sedlacek		Project Name:	Sauget - Area 2 Site R GMCS
Date	: 12/21/2008		Project Number:	21561993.00001
Laboratory	Severn Trent Laborator	y - Savannah	SDG No.:	SAS057
			Review Level:	Level III
Major Anon	nolies:			
	No samples were rejected.			
Minor Anon	nolies:			
	Acetone and methyl ethyl k	etone were qualified (U) in several VOC samples.		
Field IDs:	SED-SA2-GMCS-2	SED-SA2-GMCS-5		
	SED-SA2-GMCS-3	SED-SA2-GMCS-5 DUP		
	SED-SA2-GMCS-4	SED-SA2-GMCS-9		

1.0 Chain of Custody/Sample Condition

	Custody/oumple Condition	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	х		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt,		70.00	
	condition of samples, analytical problems or special circumstances affecting the quality of the data?	x		

Note:

The laboratory case narrative indicated that VOC LCS and MS/MSD recoveries were outside evaluation criteria. Professional judgment was used to qualify common laboratory contaminants acctone and methyl ethyl ketone. The cooler receipt form did not indicate any problems. Also, toluene and

bromomethane were detected in the equipment blank. These issues are addressed further in the appropriate sections below.

Field ID	Analyte	New RL	Qualification
SED-SA2-GMCS-2	Acetone	-	Ü
SED-SA2-GMCS-2	Methyl ethyl ketone	-	U
SED-SA2-GMCS-3	Acetone	-	υ
SED-SA2-GMCS-4	Acetone		υ
SED-SA2-GMCS-9	Acetone	*	บ
SED-SA2-GMCS-5	Acetone	-	υ
SED-SA2-GMCS-5 DUP	Acetone	-	U
SED-SA2-GMCS-5 DUP	Methyl ethyl ketone	-	U

2.0 Holding Time/ Preservation (Code H)

						Yes	No	NA
2.1	Do sample preservat	tion, collection and sto	rage condition meet m	ethod requirement?		x		
	if sample preservation and/or temperature was inappropriate (i.e., <2°>6°C, etc.), comment in report. If unpreserved or temperature is outside the range 0° (but not frozen) to 10° flag all positive results with a "J" and all non-detects "UJ". If temperature exceeds 10°, flag positive detections "J" and non-detects "R".							
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? If yes, $J(+)/UJ(-)$.						x	
	Matrix	Preserved	Aromatic	All others				
	Aqueous	No	7 days	14 days				
		Yes	14 days	14 days				
	Soil/Sediment	$4^{\circ}C \pm 2^{\circ}C$	14 days	14 days				
2.3	Have any technical	holding times been gro	ssly (twice the holding	time) exceeded? If yes, J(+)/F	₹(-).		X	

Note: All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?	(100 Sept. 100 S		Х
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.			Х
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.			х

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?	X		
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?		X	
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			X .
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated			
	to the RL for estimate (laboratory "J" flagged) concentrations.			***
4.4	If Level IV, review raw data and verify all detections for blanks were reported.			x

Note: The compounds bromomethane (16 µg/L) and toluene (1.0 µg/L) were detected in equipment blank SED-SA2-GMCS-5-EB. This sample was included as part of SDG SAS056 but was associated with the samples included in this data review. Qualifications due to blank contamination are included in the

table below. Analytical data that were reported nondetect or at concentrations greater than five times (5X) the associated blank concentration

did not require qualification.

ara mor require quantification				
Field ID	Analyte	New RL	Code	Qualification
SED-SA2-GMCS-2	Toluene	-	Х	U
SED-SA2-GMCS-5-DUP	Toluene	-	Х	บ

5.0 GC/MS Initial Calibration (Code C)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			х
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?			х
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01			
	for poor responders like ketones or alcohols)? If yes, J(+)/R(-).			Х
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			х
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			х

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			х
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.	10000		x
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			х
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, $J(+)/R(-)$.			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

Note:

7.0 Surrogate Recovery (Code S)

					Yes	No	NA
7.1	Are all sample	es listed on the ap	propriate Surrogate Recovery S	ummary Form ?	X		
7.2	Are surrogate	recoveries within	acceptance criteria specified in	the QAPP for all samples?	X .		
7.3	If No in Secti	If No in Section 7.2, were these sample(s) or method blank(s) reanalyzed?					Х
7.4	If No in Secti out.)	on 7.3, is any san	ple dilution factor greater than	10? (Surrogate recoveries ma	y be diluted		x
	Note: If SMO	recoveries do no	t meet acceptance criteria in sai	nples chosen for the MS/MSD	or diluted		
		> UCL	10% to LCL	< 10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

			Yes	No	NA
	8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
	8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per			
8.2	0.2	twenty for each matrix?	X		
	8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		Х	
		Using informed professional judgment, the data reviewer should use the MS and MSD results in	·		
		conjunction with other QC criteria and determine the need for qualification of the data for samples from			
L		the same site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note:

Sample SED-SA2-GMCS-9 was spiked and analyzed for VOCs. MS/MSD recoveries were outside evaluation criteria for 1,1,2,2-tetrachloroethane (141/144%) with criteria (65-130%), and bromoform (137/143%) with criteria (66-127%). Organic data is not qualified due to MS/MSD recoveries alone,

LCS recoveries were within evaluation criteria for 1,1,2,2-tetrachloroethane; therefore, no qualification of data was required. LCS recoveries for bromoform were above evaluation criteria, indicating a high bias. All associated bromoform results were nondetect; therefore, no qualification of data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

			Yes	No	NA
	9.1	Is an LCS recovery form present?	X		
	9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
	9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		X	
	9.4	If Level IV, verify the % recoveries are calculated correctly.			x
Г		Action for specific compound outside the acceptance criteria: %R>UCL,			
L		J(+) only; <lcl, "j"="" (+="" <30%="" be="" failures="" flagged="" j(+)="" only)<="" r(-).="" rpd="" should="" td="" uj(-);=""><td></td><td></td><td></td></lcl,>			

Note:

LCS recoveries for bromoform (130%) with criteria (66-127%) and tetrachloroethane (121%) with criteria (76-120%) were outside evaluation criteria. LCS recoveries were above evaluation criteria, indicating a high bias. All associated samples were nondetect for tetrachloroethane and bromoform; therefore, required.

10.0 Internal Standards (Code I)

					Yes	No	NA
10.1	Are internal stan	dard areas for every sample	and blank within upper and	d lower QC limits?	x		
		Area > +100%	Area < -50%	Area < -10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			
Note:	1	•		specifications are met for a g e not to flag individual samp			_
10.2		nes of internal standards with			X		
	Action: The chr	romatogram must be examine	ed to determine if any false	positives or negatives exist.	For		
	shift of a large magnitude, the reviewer may consider partial or total rejection of the data for non-detects						
	in that sample/fir	action.			İ		

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Id	Yes	No	NA	
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard			
	RRT in the continuing calibration?			x
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample			
	mass spectrum; and do sample and standard relative ion intensities agree within 30%?			х

Note

12.0 TCL/	TIC Quantitation and Reported Detection limits (Code K)	Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?			Х
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?			х
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			х
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".			Х
12.5	If Level IV, calculate a sample of positive results to verify correct calculations			х

Note

13.0 Field D	uplicate Samples (Code F)	Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?	X		
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	x		
	Action: No qualifying action is taken based on field duplicate results, however the data validator should			
	provide a qualitative assessment in the data validation report.	<u> </u>		

Note: Sample SED-SA2-GMCS-5 DUP was a duplicate of sample SED-SA2-GMCS-5.

14.0 Data Completeness

		:	Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check QA	PP or use 95% for aqueous sample,	X		
14.2	Number of samples:	6			
14.3	Number of target compounds in each analysis:	34			
14,4	Number of results rejected and not reported:	0			1
	% Completeness = $100 \times ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)$		ĺ		
	% Completeness	100			

DATA VALIDATION WORKSHEET SEMIVOLATILE ORGANIC ANALYSIS

Reviewer:	Tony Sedlacek	Project Name:	Sa		2 Site R GMCS
Date:		Project Number:		215619	93.00001
Laboratory	Severn Trent Laboratory - Savannah	SDG No.:		SA	S057
•		Review Level:		Lev	el III
Major Anomalies	:				
•	No data was rejected.				
Minor Anomalies	:				
	The compound bis(2-ethylhexyl)phthalate was	detected in the method blank.			
Field IDs:	SED-SA2-GMCS-2	SED-SA2-GMCS-5			
	SED-SA2-GMCS-3	SED-SA2-GMCS-5 DUP			
	SED-SA2-GMCS-4	SED-SA2-GMCS-9			
1.0 Chain of Cust	ody/Sample Condition		Yes	No	NA
1.1	Do Chain-of-Custody forms list all san	inles analyzed?	x		
1.2		, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custo	dy, and lab narrative indicate any problems with sample receipt, condition			
		ial circumstances affecting the quality of the data?	X		
Note:	The laboratory case narrative indicated that su	rrogate and MS/MSD recoveries, and MS/MSD RPDs were outside evaluation criteria.	Although no	t indicated in	the
	laboratory case narrative, bis(2-ethylhexyl)pht	halate was detected in the method blank. No problems were noted on the cooler receipt.	These issue	s are discusse	ed further
	in the appropriate sections below.				
2.0 Holding Tim	e/ Preservation (Code H)		Yes	No	NA
2.1		storage condition meet method requirement?	X		
4.1	If samples were not on ice or the ice w	as melted upon arrival at the laboratory and the temperature of the cooler			
		ositive results with a "J" and all non-detects "UJ".			
2.2		rmined from sampling to date of analysis, been exceeded? (See attached		X	
	Extraction: Soil/Sediment 14 days - aq				
2.3	Have any technical holding times gross	sly (twice the holding time) been exceeded? If yes, J(+)/R(-).		х	
Note:	All holding times criteria were met.				
2.0. CC/MCX	ument Performance Check (Code T)		Yes	No	NA
		tion forms present for DETRO?	1 200		X
3.1	Are GC/MS Tuning and Mass Calibra				X
3.2	Have all samples been analyzed within	is, blanks, field samples or QC samples are rejected "R".			
2.2	Have ion abundance criteria for DFTP				X
3.3	If no, all standards, blanks, field samp				7.
N	prino, an standards, branks, field samp	cs and QC samples are rejected. It .	1		
Note:					

4.0 Blanks (Method Blanks and Field Blanks)

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

			Yes	No	NA
	4.1	Is a Method Blank Summary form present for each batch?	X		
	4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?	x		
	4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?		X	
		Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be			
ll l		qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
	4.4	If Level IV, review raw data and verify all detections for blanks were reported.	<u>, </u>		X

Note: The compound bis(2-ethylhexyl)phthalate (40 µg/kg) was detected in method blank 680-116504/15-A. Analytes qualified due to blank contamination are listed in the table below.

Field II	VV96450460377687	Analyte	Batch #	Qualification	Code	Justification
SED-SA2-G	MCS-4	bis(2-ethylhexyl)phthalate	680-116504	U	Z	< 5X the blank concentration

5.0 GC/MS1	GC/MS Initial Calibration (Code C)		No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			X
5.2	Are CCCs linear applying either %RSD 30% and all other compounds <15% or >0.990?		35 (6) (6)	X
	If not, J(+)/UJ(-). In extreme cases, the reviewer may flag non-detects "R".			X
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, $J(+)/R(-)$.			Х
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.			X
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			X

Note:

6.0 Continuin	g Calibration (Code C)	Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			x
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.			X
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).			x
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.			x

urrogate	Recovery (Code	S)				Yes	No	NA
7.1	Are all sampl	es listed on the a	ppropriate Surrogate Recovery S	Summary Form ?		х		
7.2	Are surrogate	recoveries within	acceptance criteria specified in	the QAPP for all samples and	d method blanks?	40.00	x	
7.3	Are more than	one of either fra	ction outside the acceptance crit	eria?			X	
7.4	If Yes in Section 7.3, are these sample(s) or method blank(s) reanalyzed?						х	
7.5	If Yes in Section 7.3, is any sample dilution factor greater than 10?						x	
			ay unacceptable recoveries in the neutrals are assessed separately		, then no reanalysis			
		> UCL	10% to LCL	< 10%				
	Positive	Ј	Ј	J				
	Non-detect	None	UJ	R				

Surrogate recovery for phenol-d₅ (42%) was outside evaluation criteria (43-110%) in sample SED-SA2-GMCS-2. Surrogate recoveries for phenol-d5 (35%) with criteria (43-110%), 2-Fluorophenol(29%) with criteria (41-110%), nitrobenzene-d₅ (31%) with criteria (36-110%) and 2-fluorobiphenyl (35%) with criteria (44-110%) were outside evaluation criteria in sample SED-SA2-GMCS-3. Sample SED-SA2-GMCS-3 was re-extracted due to poor surrogate recoveries. All surrogate recoveries were within evaluation criteria in the re-extracted analysis. Due to a more efficient extraction, the sample results from the re-extraction will be reported for sample SED-SA2-GMCS-3. Surrogate recovery for 2-fluorophenol (40%) with criteria (41-110%) was outside evaluation criteria in sample SED-SA2-GMCS-4. Since only one acid fraction surrogates were outside criteria in samples SED-SA2-GMCS-2 and SED-SA2-GMCS-4 and National Functional Guidelines indicates to qualify data if two or more surrogates per SVOC fraction are outside criteria; therefore, no qualification of the SVOC data was required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

			Yes	No	NA NA
	8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	х		
	8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?	X		
	8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?		х	
		Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction			
		with other QC criteria and determine the need for qualification of the data for samples from the same			
1		site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note:

Samples SED-SA2-GMCS-9 and SED-SA2-GMCS-3 were spiked and analyzed for SVOCs. Two out of 65 MS recoveries, 27 out of 65 MSD recoveries and two out of 65 MS/MSD RPDs for sample SED-SA2-GMCS-3 were outside evaluation criteria. Thirty-six out of 65 MS recoveries and one out of 65 MSD recoveries were outside evaluation criteria in sample SED-SA2-GMCS-9. Organic data is not qualified due to MS/MSD recoveries alone, LCS recoveries were within evaluation criteria; therefore, no qualification of data was required.

9.0 Laborator	y Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)	Yes	No	NA
9.1	Is an LCS recovery form present?	Х		
9.2	Is LCS analyzed at the required frequency for each matrix?	x		
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?	X		
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <lcl, "j"="" (+="" <30%="" be="" failures="" flagged="" j(+)="" only)<="" r(-).="" rpd="" should="" td="" uj(-);=""><td></td><td></td><td></td></lcl,>			
9.4	If Level IV, verify the % recoveries are calculated correctly.			х

Note: All LCS recoveries were within evaluation criteria.

	tandards (Code I)				Yes	No	NA
10.1	Are internal stan			lower QC limits for each continuing	X		
		Area $> +100\%$	Area < -50%	Area < -10%			
	Positive	J	J	J	1		
	Non-detect	None	UJ	R			
Note:							
				ed to the mid-point initial calibration,			
				re met for a given sample, using inform	ned		
		gment, the reviewer may cho					
10.2		nes of internal standards with			x		
				positives or negatives exist. For shift	of		
	-	le, the reviewer may consider	r partial or total rejection o	f the data for non-detects in that			
	sample/fraction.					····	
Note:	Internal standard are	ea counts and retention times wer	e within evaluation criteria.				···
TCL Iden	tification (Code W				Yes	No	NA
11.1	Is the relative ret	tention time (RRT) of each re	eported compound within	0.06 RRT units of the standard RRT in	1		<u>.</u>
	the continuing ca	alibration?					X
11.2				ctrum also present in the sample mass			
	spectrum; and do	o sample and standard relative	e ion intensities agree wit	hin 30%?			X
Note:							
TCL/TIC	Quantitation and	Reported Detection limits	(Code K)		Yes	No	NA
12.1	Are RLs used co	onsistent with those specified	l in the QAPP?				X
12.2		adjusted to reflect dilutions		quired?			<u>x</u>
12.3				esent in the sample spectrum?			Х
12.4	Are any positive	s reported that exceed the lin	near range of the instrumer	nt? If yes, than flag "J".			x
12.5	If Level IV, calc	ulate a sample of positive re	sults to verify correct calcu	ılations		<u> </u>	X
Note:							
Field Dup	licate Samples (Co	de F)			Yes	No	NA
13.1	Were any field d	luplicates submitted for SVC	C analysis?		х		
13.2	Were all RPD or	r absolute difference values v	within the control limits?		X		
	No action is take	en based on field duplicate re	esults, however the data va	lidator should provide a qualitative			
	3	e data validation report.	•	•			
Note:	Sample SED-SA2-0	GMCS-5 DUP was a duplicate of	sample SED-SA2-GMCS-5.				
0 Data Com	pleteness				Yes	No	NA
14.1	To 9/ nompletons	one within the control limite?	(Control limit: Check OA	APP or use 95% for aqueous sample, 90		110	144
14.1	Number of samp		(Condormant, Check QF	6	770 A	I	
14.2		ones: et compounds in each analys:		65			
14.3		its rejected and not reported:		0			
14.4		s = 100 x ((14.1 x 14.2) - 14)		V			
			.)/(14.1 X 14.2)	100			
	% Completene	53		A 0 0			

DATA VALIDATION WORKSHEET PESTICIDES ANALYSIS

Reviewer:	Tony Sediacek Project Name	Name: Sauget - Area 2 Site R GM		R GMCS
Date:		:	1561993.00	001
Laboratory	Severn Trent Laboratory - Savannah SDG No.	:	SAS057	
	Review Level	:	Level III	
Major Anom	alies:			
	No data was rejected.			
Minor Anom	alies:			
	Samples were not qualified due to this data review.			
E. HIED				
Field IDs:	SED-SA2-GMCS-2 SED-SA2-GMCS-5			
	SED-SA2-GMCS-3 SED-SA2-GMCS-5 DUP			
	SED-SA2-GMCS-4 SED-SA2-GMCS-9			
10 Chair of	Custody/Sample Condition			
*** ************	Outrough Burney Contaction	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of			
	samples, analytical problems or special circumstances affecting the quality of the data?	x		
Note:	Although not indicated in the laboratory case narrative, surrogates were diluted out and not recovered in sample SED-SA2-GMCS-2. The	e cooler rece	ipt did not	
	indicate any problems.			
40 11 11		Yes	No	NA
	Time/ Preservation (Code h)	400.00000000000000000000000000000000000	140	MA
2.1	Do sample preservation, collection and storage condition meet method requirement?	Х	l	
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler wa	s		
	elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached			
	Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		X	
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days	 	Letosuportomonesion	
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		x	
Note:	All holding times criteria were met.			
3.0 Blanks (Method Blanks and Field Blanks)			
	(Code x - Field Blank Contamination, Code z - Method blank contamination)		
		Yes	No	NA
3.1	Is a Method Blank Summary form present for each batch?	X		
3.2	Do any method blanks have positive results (TCL)?		X	
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?		X	
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated	i		
	to the RL for estimate (laboratory "J" flagged) concentrations.			****
3.4	If Level IV, review raw data and verify all detections for blanks were reported.			x
Note:	All blank criteria were met.			

4.0 GC/EC	D Instrument Performance Check (Code b)	Yes No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?		x
4.2	Have all samples been analyzed within twelve hours of the performance check sample?		х
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".		
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?		x
	If no, all standards, blanks, field samples and QC samples are rejected "R".		

5.0 Initial Calibration (Code r)

		Yes	No	NA
5.1	Are Initial Calibration summary forms present and complete for each instrument used?			x
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			X
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".	<u> </u>		
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			X

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			X
6.2	Has a continuing calibration standard been analyzed every 12 hours?			х
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?			x
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.			X

Note:

7.0 Surrogate Recovery (Code s)

					Yes	No	NA
7.1	Are all sample	es listed on the ap	propriate Surrogate Recovery S	ummary Form ?	X		
7.2	Are surrogate	recoveries within	acceptance criteria specified in	the QAPP for all samples?		x	
7.3	If No in Section	on 7.2, were these	sample(s) or method blank(s) i	eanalyzed?		х	
7.4							
	If No in Section	on 7.3, is any sam	ple dilution factor greater than	10? (Surrogate recoveries may be diluted out.)	x		
		> UCL	10% to LCL	< 10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			

Note: Surrogates were diluted out and not recovered in sample SED-SA2-GMCS-2, no qualification of data was required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	x		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?	X		j
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples from the same site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Samples SED-SA2-GMCS-3 and SED-SA2-GMCS-9 were spiked and analyzed for pesticides.

9.0 Laboratory Control Sample (LCS/LCSD) (Code I - LCS recovery Code e - RPD)

		Yes	No	NA.
9.1	Is an LCS recovery form present?	x		
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?	X		
9.4	If Level IV, verify the % recoveries are calculated correctly.			X
	Action for specific compound outside the acceptance criteria: %R>UCL,			
	J(+) only; <lcl, "j"="" (+="" <30%="" be="" failures="" flagged="" j(+)="" only)<="" r(-).="" rpd="" should="" td="" uj(-);=""><td></td><td></td><td>~~~~~</td></lcl,>			~~~~~

Note: All LCS recoveries were within evaluation criteria.

10.0 TCL Id	lentification (Code w)	Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the			
	continuing calibration?			x

Note:

11.0 TCL	Quantitation and Reported Detection limits (Code p)	Yes No	NA
I 1.1	Are RLs used consistent with those specified in the QAPP?		X
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?		х
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".		Х
11.4	If Level IV, calculate a sample of positive results to verify correct calculations		х
Note:			

12.0 Field Duplicate Samples (Code f)		Yes	No	NA
12.1	Were any field duplicates submitted for analysis?	X		
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	X		
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a			
	qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-5 DUP was a duplicate of sample SED-SA2-GMCS-5.

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAPP)	or use 95% for aqueous sample, 90% for	х		
13.2	Number of samples:	6			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	100			

DATA VALIDATION WORKSHEET HERBICIDES ANALYSIS

 .	Postered Names	.		0.400			
Reviewer:			561993.000				
Date:			SAS057	<u> </u>			
Laboratory	Severn Trent Laboratory - Savannah SDG No.: Review Level:		Level III				
Major Anom	·		LC (C) III				
Major Anom	No data was rejected.						
	170 data was rejected.						
Minor Anom	alies:						
	No analytes required qualification based on this data review.						
Field IDs:	SED-SA2-GMCS-2 SED-SA2-GMCS-5						
	SED-SA2-GMCS-3 SED-SA2-GMCS-5 DUP						
	SED-SA2-GMCS-4 SED-SA2-GMCS-9						
1.0 Chain of	Custody/Sample Condition						
		Yes	No	NA			
1.1	Do Chain-of-Custody forms list all samples analyzed?	x					
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X					
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of						
	samples, analytical problems or special circumstances affecting the quality of the data?		х				
Note:	Although not indicated in the laboratory case narrative, MS/MSD and LCS recoveries were outside evaluation criteria. The cooler receipt form did not						
	indicate any problems.						
20 11.13:	Time (Decrease (Code b)						
2.0 Holding	Time/ Preservation (Code h)	Yes	No	NA			
2.1	De complementation and accuracy condition most method requirement?	x		1,12			
2.1	Do sample preservation, collection and storage condition meet method requirement? If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler	A	l				
	was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".						
122		 	17.000.000				
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached		x				
	Holding Time Table for sample holding time) If yes, J(+)/UJ(-).	 	A				
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days						
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X				
L			<u> </u>				
Note:	All holding time criteria were met.						
3.0 Blanks ((Method Blanks and Field Blanks)						
	(Code x - Field Blank Contamination, Code z - Method blank contamination)		1	37.1			
T		Yes	No	NA			
3.1	Is a Method Blank Summary form present for each batch?	Х	500000000000000000000000000000000000000				
3.2	Do any method blanks have positive results?	<u> </u>	X				
3.3	Do any field/rinse/equipment blanks have positive results?	<u> </u>	X				
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated						

Note: All blank criteria were met.

to the RL for estimate (laboratory "J" flagged) concentrations.

If Level IV, review raw data and verify all detections for blanks were reported.

x

3.4

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?			х
4.2	Are calibration factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument			х
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.			x

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?			Х
5.2	Has a continuing calibration standard been analyzed every 12 hours?			Х
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 20%)?			х
	If yes, a marginal increase in response >20% then $J(+)$ only; a decrease in response then $J(+)/UJ(-)$. For %D > 50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.		,,,	х

Note:

6.0 Surrogate Recovery (Code s)

					Yes	No	NA
6.1	Are all sampl	es listed on the a	ppropriate Surrogate Recovery S	ummary Form ?	х		
6.2	Are surrogate	recoveries withi	n acceptance criteria specified in	the QAPP for all samples?	x		
6.3	If No in Secti	on 6.2, were thes	e sample(s) or method blank(s) r	eanalyzed?			х
6.4							
	If No in Secti	on 6.3, is any sar	nple dilution factor greater than	10? (Surrogate recoveries may be diluted out.)			x
		> UCL	10% to LCL	< 10%			
	Positive	Ј	J	j			
	Non-detect	None	UJ	R			

Note:

All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

			Yes	No	NA
Г	7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
	7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty			
	1.2	for each matrix?	X		
	7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?	307,000,000,000	x	
		Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with			
***************************************		other QC criteria and determine the need for qualification of the data for samples from the same site/matrix.			
		Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note:

Samples SED-SA2-GMCS-4 and SED-SA2-GMCS-9 were spiked and analyzed for herbicides. The MS/MSD recoveries for MCPA (136/116%) were outside evaluation criteria (54-110%) in sample SED-SA2-GMCS-4. The MS/MSD recoveries for MCPA (118/117%) were outside evaluation criteria (54-110%) in sample SED-SA2-GMCS-9. The MSD recovery for 2,4-D (115%) was outside evaluation criteria (55-112%) in sample SED-SA2-GMCS-9. Organic data is not qualified due to MS/MSD recoveries alone, the LCS recoveries for MCPA were also above evaluation criteria, MCPA was nondetect in all samples; therefore, no qualification of data was required.

8.0 Laboratory Control Sample (LCS/LCSD) (Code l - LCS recovery Code e - RPD)

		Yes	No	NA
8.1	Is an LCS recovery form present?	X		
8.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	x		
8.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		х	
8.4	If Level IV, verify the % recoveries are calculated correctly.			Х
	Action for specific compound outside the acceptance criteria: %R>UCL,			
	J(+) only; $<$ LCL, $J(+)/UJ(-)$; $<$ 30% $J(+)/R(-)$. RPD failures should be flagged "J" (+ only)			
37.7.	THE TOO 1 CONTRACTOR AND THE TOO 1 CONTRACTOR	2 4 1 (00 117420/7 4		

Note: The LCS recoveries for MCPA (113%) and (119%) was outside evaluation criteria (54-110%) in LCS samples 680-117383/10-A and 680-117439/7-A, respectively.

The compound MCPA was nondetect in all samples; therefore, no qualifications of data was required.

9.0 TCL Identification (Code w) 9.1 Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration? Note:

		No	NA
s used consistent with those specified in the QAPP?			X
se limits adjusted to reflect dilutions and/ or percent solids as required?			x
positives reported that exceed the linear range of the instrument? If yes, than flag "J".			х
IV, calculate a sample of positive results to verify correct calculations			х
y	s used consistent with those specified in the QAPP? ese limits adjusted to reflect dilutions and/ or percent solids as required? y positives reported that exceed the linear range of the instrument? If yes, than flag "J". IV, calculate a sample of positive results to verify correct calculations	ese limits adjusted to reflect dilutions and/ or percent solids as required? y positives reported that exceed the linear range of the instrument? If yes, than flag "J".	ese limits adjusted to reflect dilutions and/ or percent solids as required? y positives reported that exceed the linear range of the instrument? If yes, than flag "J".

.0 Field D	Duplicate Samples (Code f) Were any field duplicates submitted for herbicide analysis? Were all RPD or absolute difference values within the control limits outlined in the QAPP? Action: No qualifying action is taken based on field duplicate results, however the data validator should prequalitative assessment in the data validation report.	Yes	No	NA
11.1	Were any field duplicates submitted for herbicide analysis?	X		
11.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?	X		
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a			
	qualitative assessment in the data validation report.			

Note: Sample SED-SA2-GMCS-5 DUP was a duplicate of sample SED-SA2-GMCS-5.

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QA	PP or use 95% for aqueous sample, 90% for	X		
12.2	Number of samples:	6			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			
	% Completeness = $100 \times ((12.1 \times 12.2) - 12.3) / (12.1 \times 12.2)$				
	% Completeness	100			

DATA VALIDATION WORKSHEET - Level III Review Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer:		Tony Sedlacek	Project Name:	Sauget - Area 2 Site R GMCS
Date:		12/21/2008	Project Number:	21561993.00001
Laboratory		Severn Trent Laboratory - Savannah	SDG No.:	SAS057
		•	Review Level:	Level III
Major Anomolies:				
	No data was rejected.			
Minor Anomolies:				
	Analytes were qualified du	e to MS/MSD and MSD recoveries.		
Field IDs:	SED-SA2-GMCS-2	SED-SA2-GMCS-5		

1.0 Chain of Custody	/Sample Condition/Raw Data		ICP		ICP-			FAA		/AA-E	[g
		Yes	No	NA Y	s N	o NA	Yes	No NA	Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	x	70,000		1000 1000				х		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was mai	x	NAME OF THE PERSON				30.00		x		
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?	1								x	
1.4	Does sample preservation, collection and storage meet method requirement? (water samples: with Nitric Acid to pH < 2, and soil/sediment samples: $4^{\circ}C \pm 2^{\circ}C$)	X							x		
1.5	Are the digestion logs present and complete with pH values, sample weights dilutions, final volumes. % solids (for soil samples), and preparation dates? For any missing or incomplete documentation, contact the laboratory for explanation/resubmittal.	4		x							x

SED-SA2-GMCS-5 DUP

SED-SA2-GMCS-9

Note:

Although not indicated in the laboratory case narrative, metals were detected in the method blank. Metals MS/MSD and MSD RPDs were outside evaluation criteria.

Metals were detected in the method blank that was included as part of SDG SAS056. These issues are further discussed in the appropriate sections below.

The cooler receipt form did not indicate any problems.

SED-SA2-GMCS-3

SED-SA2-GMCS-4

2.0 Holding Time (Code	folding Time (Code h)		ICP		ICP-MS		GFAA		AA-H	g
		Yes	No	NA Ye	s No N	IA Y	es No NA	Yes	No	NA
2.1	Have any technical holding times, determined from date of collection to date of									
	analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached			1						
	Holding Time Table.		x			-			x	
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding		X							
	time criteria)									
	J(+)/R(-).									

All samples were analyzed within holding time criteria.

0 Instrument Calibration	(Code c)						ICP	IC	P-MS	(SFAA	CV	AA-Hg	,
						Yes	No	NA Yes	No NA	Yes	No NA	Yes	No	NA
3.1	Are sufficient standare	ds include	d in the calibra	ation curve? (I	CP/ICP-MS: blank	+		10000						
	one standard; GFAA: I	olank + thr	ee standards; C	VAA: blank +	five standards)			x						
3.2	Are the correlation coe	fficients >	0.995? (for GI	AA and CVA	A) Action: J(+)/UJ([-).								x
3.3	Was an initial calibra	tion verif	ication (ICV)	analyzed at th	e beginning of ea	ch	N COL							
	analysis? Action: If no, use professional judgment to determine affect on the data												***************************************	
	and note in reviewer na	arrative.						x						x
3.4	Was continuing calibra	ition verifi	cation (CCV) j	performed ever	y 10 analysis or eve	ry								
	2 hours, whichever is	more freq	uent? Action:	If no, use prof	fessional judgment	to								
	determine affect on the	data and	note in reviewe	r narrative.				_						
3.5	Are all calibration sta	ndard ner	Sent recoveries	(ICV and CC)	(1) within the contr	-01		X						X
3.3	limits? Mercury (80%	~		*	v) within the conti	OI		_						**
	• `	,		` ,				A						А
	Action:	R(+/-)	J(+)/UJ(-)	J(+)	R(+)					l de la				
	Mercury	< 65%	65% - 79%	121% - 135%	> 135%									
	Other Metals	< 75%	75% - 89%	111% - 125%	> 125%									

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

			ICP	•	IC	<u> P-M</u>	1S		FAA	CV	/AA-H	g
		Yes	No	NΑ	Yes	No	NA	Yes	No NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20											
	samples, per batch, per matrix and per level)?	х								х		
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the											
	blank value are determined for positive and negative blank values.	х									X	
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional									10000		
	judgment to determine affect on the data note in reviewer narrative.			x	1000							X
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every											
	2 hours whichever is more frequent? Action: If no, use professional judgment to									97.0		
	determine affect on the data to note in reviewer narrative.			x								x

4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5			
	times the blank value are determined for positive and negative blank values.	x		X
4.6	Are there samples with concentrations less than five times the highest level in			
	associated blanks? Action: If yes, U at reported concentration.	x		x
4.7	Are there samples with non-detect results or with concentrations less than five times			
	the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).	x		X

The compounds calcium (9.5 mg/kg), iron (2.5 mg/kg), lead (0.34 mg/kg) and selenium (0.22 mg/kg) were detected in method blank MB 680-116648/26-A. The compounds

calcium (8.5 mg/kg), iron (2.8 mg/kg), lead (0.33 mg/kg) and magnesium (1.2 mg/kg) were detected in method blank MB 680-116776/21-A.

The compounds calcium (0.26 mg/L), cobalt (0.0014 mg/L), magnesium (0.044 mg/L) and zinc (0.0089 mg/L) were detected in the equipment blank SED-SA2-GMCS-5-EB.

Analytical data was reported at concentrations greater than five times (5X) the associated blank concentration; therefore, did not require qualification.

5.0 ICP Interference C	and at the beginning or once every 8 hours (whichever is more frequent) for						ИS	GFAA	CVAA-Hg	
		Yes	No .	NA.	Yes	No	NA	Yes No NA	Yes No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-MS?			x						
5.2	Are the ICS AB recoveries within 80% - 120%?			x						8
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?			x						
5.4	level in the ICS?			x						
	Action: Not Spiked Analytes						:			

Note:

6.0 Laboratory Control Sa	mple (LCS) (Code l - Recovery, Code e - RPD)		ICP		ICP-	MS	GFA	A	CVA	AA-Hg	
-		Yes	No	NA Y	les N	o NA	Yes No	NA	Yes]	No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 sample per batch, per matrix and per level)? Action: If no, J(+) any sample not associate with LCS results.	100000000000000000000000000000000000000							х		
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120% except Ag and Sb; Solid limits: as per EPA-EMSL/LV) Action: Solid Aqueous $ < LCL > UCL < 50\% 50\% - 79\% > $	-	x							x	

Note:

All recoveries were within evaluation criteria.

7.0 Laboratory Duplicates	(Code k)		ICP	T	IC	P-M	IS	(FAA	CV	AA-Hg	
• •		Yes	No	NA	Yes	No	NA	Yes	No NA	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.	200 m 200 m	x								x	
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.			х								x
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+). Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.			х								x

8.0 Spike Sample Ana	lysis -Pre-Digestion (Code m - Recovery, Code d - RPD)	[ICF	- 1		CP-N		<u> </u>	3FAA		VAA-	
			Yes	No	NA	Yes	No	NA	Yes	No N	IA Ye	s No	NA
8.1	Was a spiked sample prepared and analyzed at the correct frequency (one per samples, per batch, per matrix and per level)? Action: If no, J(+), with profession judgment, analytes not associated with matrix spike results.										x		·
8.2	Was a field blank used for the MS analysis? Action: If yes, J(+) v professional judgment. Note in worksheet. Note: Matrix spike analysis may be performed on a field blank when it is the aqueous sample in an SDG.			х								X	
8.3	For all analytes with sample concentration < 4 x spike concentration, are supercoveries within the control limit of 75-125%? (No control limit applies analytes with concentration > 4 x spike concentration.)	s to	1.00	x							X		

Note:

Sample SED-SA2-GMCS-9 was spiked and analyzed for metals and mercury. Sample SED-SA2-GMCS-4 was spiked and analyzed for mercury.

MS/MSD recoveries were outside evaluation criteria (75-125%) for aluminum (74/469%), calcium (1370/356%) and manganese (4/179%) and MSD recovery

for magnesium (205%) and MS/MSD RPD for aluminum (62), calcium (107), magnesium (49) and manganese (60) with criteria (>20) in sample SED-SA2-GMCS-9.

Qualifications due to MS/MSD recoveries are listed in the table below. Analytes with sample concentrations greater than 4X the spike concentrations did not require

evaluation or qualification.

Field ID	Analyte	Code	Qualification
SED-SA2-GMCS-9	Aluminum	m	J
SED-SA2-GMCS-9	Calcium	m	J
SED-SA2-GMCS-9	Magnesium	m	J
SED-SA2-GMCS-9	Manganese	m	J

9.0 Instrument Detection	on Limits (IDL)		ICP			No NA Yes No NA Ye	CVA					
		Yes	No	NA	Yes	No 1	VA Y	s No	NA	Yes N	0	NA
9.1	Are all IDL equal to or less than the reporting limits specified?		<u> </u>	x								X
Note:												
10.0 ICP Serial Dilution	ns (Code s)		ICP		IC	P-MS	S	GFA	ιA	CVA	A-Hg	
		Yes	No	NA	Yes	No 1	VA Y	es No	NA	Yes N	0	NA
10.1	Were serial dilutions performed?			x								
10.2	Was a five-fold dilution performed?			х								
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x the	9	X.									
	IDL in the original sample? If no, J(+).			x								
Note:												
11.0 Field Duplicate Sa	mples (Code f)		ICP	,	ĭC	P-M	s T	GFA	. A	CVA	A-Hg	
11.0 Tield Duplicate Sa	mpros (Couci)	Yes					,					NA
11.1	Were any field duplicates submitted for metal analysis?	x		1			İ		1	x	<u> </u>	
	Are all field duplicate results within control? (For aqueous sample, RPD values	4							1		1	
11.2	35% or difference $< \pm 2 \times PQL$ and For solids, RPD $< 50\%$ or difference $< \pm 4 \times PQL$	X								X		
Note:	Sample SED-SA2-GMCS-5 DUP was a duplicate of sample SED-SA2-GMCS-5.				***********							
12.0 Result Verification	1 (Code O)		ICP	>	IC	P-M	s T	GFA	ΑA	CVA	A-Hg	
		Yes	No	ΝA								NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-				33070			2015	İ			
	weight basis?		è	x					-			x
12.2	Were all dilution reflected in the positive results and detection limits?	2800		x	- 60		100					x
Note:									·	······································		
13.0 Data Completeness				•								
15.0 Data Completeness	,											
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use	T							•			
14.1	95% for aqueous sample, 90% for soil sample)											
13.2	Number of samples:	6			0		(5		6		
13.3	Number of target compounds in each analysis:	22	1		0	1		5		1		
13.4	Number of results rejected and not reported:	0			0	1		5		0		
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				l							
	% Completeness	100			###		#:	##		100		
Note:												

DATA VALIDATION WORKSHEET VOLATILE ORGANIC ANALYSIS

Reviewer:	Tony Sedlacek	Project Name:	Sauget - Area 2 Site R
Date:	1/22/2009	Project Number:	21561993.0000
Laboratory	Severn Trent Laboratory - Savannah	SDG No.:	SAS057
		Review Level:	Level IV

Major Anomalies:

No data was rejected.

Minor Anomalies:

Acetone and methyl ethyl ketone were qualified (U) using professional judgment. Chloroethane was qualified due to continuing calibration %D.

Field IDs: SED-SA2-GMCS-2

SED-SA2-GMCS-9 SED-SA2-GMCS-5-EB

1.0 Chain of Custody/Sample Condition

			162	140	1373
	1.1	Do Chain-of-Custody forms list all samples analyzed?	х		
		Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
		Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt,			
1		condition of samples, analytical problems or special circumstances affecting the quality of the data?	х		

Note:

The laboratory case narrative indicated that VOC LCS and MS/MSD recoveries were outside evaluation criteria. Professional judgment was used to qualify common laboratory contaminants acetone and methyl ethyl ketone. Also, toluene and bromomethane were detected in the equipment blank.

The continuing calibration %D for chloroethane was outside evaluation criteria. These issues are addressed further in the appropriate sections below.

The cooler receipt form did not indicate any problems.

Field ID	Analyte	New RL	Qualification
SED-SA2-GMCS-2	Acetone	-	υ
SED-SA2-GMCS-2	Methyl ethyl ketone	-	U
SED-SA2-GMCS-9	Acetone	-	U

2.0 Holding Time/ Preservation (Code H)

					Yes	No	NA
2.1	Do sample preservat	ion, collection and stor	age condition meet me	thod requirement?	X		
2.2	unpreserved or tempers. "J" and all non-detection	erature is outside the range C ts "UJ". If temperature exceloiding times, determined fro Preserved No Yes 4 °C ± 2 °C	ange 0° (but not frozen e exceeds 10°, flag pos	<2° >6°C, etc.), comment in report to 10° flag all positive results whitive detections "J" and non-detective of analysis, been exceeded? In	vith a ets "R".	, x	
	Matrix	Preserved	Aromatic	All others			
	Aqueous	No	7 days	14 days			
		Yes	14 days	14 days			
	Soil/Sediment	$4^{\circ}C \pm 2^{\circ}C$	14 days	14 days			
2.3	Have any technical h	olding times been gros	ssly (twice the holding	time) exceeded? If yes, J(+)/R(-)		x	

Note:

All holding time criteria were met.

3.0 GC/MS Instrument Performance Check (Code T)

		Yes	No	NA NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for bromofluorobenzene (BFB)?	х		
3.2	Have all samples been analyzed within twelve hours of the BFB tune? If no, flag R.	X		
3.3	Have ion abundance criteria for BFB been met for each instrument used? If no, flag R.	X		

Note:

4.0 Blanks (Method Blanks, Field Blanks and Trip Blanks)

(Code X - Field Blank Contamination, Code Y - Trip blank contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?	x		
4.2	Do any method blanks have positive VOA results (TCL and/or TIC)?		x	
4.3	Do any field/trip rinse/equipment blanks have positive VOA results (TCL and/or TIC)?			X
	Action: Positive sample results <5X (or 10X for common volatile lab contaminants- methylene chloride, acetone, and 2-butanone) the blank concentration should be qualified "U". The result should be elevated			
	to the RL for estimate (laboratory "J" flagged) concentrations.			
4,4	If Level IV, review raw data and verify all detections for blanks were reported.	X 55.55		

Note:

The compounds bromomethane (16 µg/L) and toluene (1.0 µg/L) were detected in equipment blank SED-SA2-GMCS-5-EB. This sample was included as part of SDG SAS056 but was associated with the samples included in this data validation. Qualifications due to blank contamination are included in the table below. Analytical data that were reported nondetect or at concentrations greater than five times (5X) the associated blank concentration

did not require qualification.

Field ID	Analyte	New RL	Code	Qualification
SED-SA2-GMCS-2	Toluene	-	Х	U

5.0 GC/MS Initial Calibration (Code C)

	Yes	No	NA
Are Initial Calibration summary forms present and complete for each instrument used?	X		
Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?	X		
If not, J(+)/UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01			
for poor responders like ketones or alcohols)? If yes, J(+)/R(-).		X	
Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.	X		
If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.	x		
	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990? If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R". Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-). Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.	Are Initial Calibration summary forms present and complete for each instrument used? Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990? If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R". Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-). Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.	Are Initial Calibration summary forms present and complete for each instrument used? Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990? If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R". Do any SPCC compounds have an RRF less than specification or any other compounds < 0.05 (use 0.01 for poor responders like ketones or alcohols)? If yes, J(+)/R(-). Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.

Note:

6.0 Continuing Calibration (Code C)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?	X		
6.2	Has a continuing calibration standard been analyzed every 12 hours?	X		
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.	x		
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?	X		
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/UJ(-). For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).		x	
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.	X		

Note:

The %D for chloroethane (-26.8%) was outside evaluation criteria (20%). Qualifications due to continuing calibration %Ds are listed in the table below.

Field ID	Analyte	Code	Qualification
SED-SA2-GMCS-2	Chloroethane	С	υJ

7.0 Surrogate Recovery (Code S)

•					Yes	No	NA
7.1	Are all sampl	es listed on the app	propriate Surrogate Recovery Su	mmary Form ?	х		
7.2	Are surrogate	recoveries within	acceptance criteria specified in	the QAPP for all samples?	x		
7.3	If No in Secti	on 7.2, were these	sample(s) or method blank(s) re	eanalyzed?			х
7.4	If No in Secti	ion 7.3, is any sam	ole dilution factor greater than l	0? (Surrogate recoveries may be di	luted		x
	Note: If SMC recoveries do not meet acceptance criteria in samples chosen for the MS/MSD or diluted				ıted		
		> UCL	10% to LCL	< 10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			

Note: All surrogate recoveries were within evaluation criteria.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	NA.
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	x		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		х	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples from the same site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-9 was spiked and analyzed for VOCs. MS/MSD recoveries were outside evaluation criteria for 1.1,2,2-tetrachloroethane (141/144%) with criteria (65-130%), and bromoform (137/143%) with criteria (66-127%). Organic data is not qualified due to MS/MSD recoveries alone.

LCS recoveries were within evaluation criteria for 1.1,2,2-tetrachloroethane; therefore, no qualification of data was required. LCS recoveries for bromoform were above evaluation criteria, indicating a high bias. All associated bromoform results were nondetect; therefore, no qualification of data was required.

9.0 Laboratory Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)

	toty control ampie (200) 2000) (Accounty control, 14.2 2000)	Yes	No	NA
9.1	Is an LCS recovery form present?	X		
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?		х	
9.4	If Level IV, verify the % recoveries are calculated correctly.	X		<u> </u>
	Action for specific compound outside the acceptance criteria: %R>UCL,			
	J(+) only; $<$ LCL, $J(+)/UJ(-)$; $<$ 30% $J(+)/R(-)$. RPD failures should be flagged "J" (+ only)			

Note: LCS recoveries for bromoform (130%) with criteria (66-127%) and tetrachloroethane (121%) with criteria (76-120%) were outside evaluation criteria. LCS recoveries were above evaluation criteria, indicating a high bias. All associated samples were nondetect for tetrachloroethane and bromoform; therefore, required.

10.0 Internal Standards (Code I)

	•				Yes	No	NA
10.1	Are internal stan	dard areas for every sample	and blank within upper and	lower QC limits?	X		
		Area > +100%	Area < -50%	Area < -10%			
	Positive	J	J	j			
	Non-detect	None	UJ	R			
Note:	calibration, not sample to continuing calibration. Thus, if all other QC specifications are met for a given sample, using informed professional judgment, the reviewer may choose not to flag individual samples in this case.						
10.2		nes of internal standards with			x		
	Action: The chromatogram must be examined to determine if any false positives or negatives exist. For						
	shift of a large n	nagnitude, the reviewer may	consider partial or total reje	ction of the data for non-dete	ects		
	in that sample/fr	action.			1		

Note: Internal standard area counts and retention times were within evaluation criteria.

11.0 TCL Id	11.0 TCL Identification (Code W)			NA
11.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard			
	RRT in the continuing calibration?	х		
11.2	Are the three ions of greatest intensity present in the standard mass spectrum also present in the sample			
	mass spectrum; and do sample and standard relative ion intensities agree within 30%?	X		

Note:

2.0 TCL/	FIC Quantitation and Reported Detection limits (Code K)	Yes	No	NA
12.1	Are RLs used consistent with those specified in the QAPP?	X		• • • • • • • • • • • • • • • • • • • •
12.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?	х		
12.3	Are TIC ions greater than ten percent in the reference spectrum also present in the sample spectrum?			x
12.4	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".		X	
12.5	If Level IV, calculate a sample of positive results to verify correct calculations	Х		

Note:

13.0 Field D	ouplicate Samples (Code F)	Yes	No	NA
13.1	Were any field duplicates submitted for VOC analysis?		х	
13.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			Х
	Action: No qualifying action is taken based on field duplicate results, however the data validator should			
	provide a qualitative assessment in the data validation report.			

Note:

14.0 Data Completeness

			Yes	No	NA
14.1	Is % completeness within the control limits? (Control limit: Check Q	APP or use 95% for aqueous	X		,
14.2	Number of samples:	3			
14.3	Number of target compounds in each analysis:	34			
14.4	Number of results rejected and not reported:	0			
	% Completeness = $100 \times ((14.1 * 14.2) - 14.3) / (14.1 * 14.2)$				
	% Completeness	100			

DATA VALIDATION WORKSHEET SEMIVOLATILE ORGANIC ANALYSIS

Reviewer:	Tony Sedlacek Project Name:	me: Sauget - Area 2 Site R C		2 Site R GMCS
Date:	1/22/2009 Project Number:	ber: 21561993.00001		93.00001
Laboratory	Severn Trent Laboratory - Savannah SDG No.:		SAS	S057
	Review Level:		Lev	el IV
Major Anomalies	:			
	No data was rejected.			
Minor Anomalies	:			
	Analytes were qualified due to initial calibration %RSDs.			
Field IDs:	SED-SA2-GMCS-2			
	SED-SA2-GMCS-9			
	SED-SA2-GMCS-5-EB			
1.0 Chain of Cust	ody/Sample Condition	Yes	No	Ν̈́Α
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition	2,000,000,750,000,000		
	of samples, analytical problems or special circumstances affecting the quality of the data?	x		
Note:	The laboratory case narrative indicated that surrogate and MS/MSD recoveries, and MS/MSD RPDs were outside evaluation criteria.	Initial calibr	ation %RSD:	s were outside
	evaluation criteria and continuing calibration %Ds were outside evaluation criteria. No problems were noted on the cooler receipt. The	nese issues a	re discussed	further in the
	appropriate sections below.			
20 11-11: 7:	ID (C. 1. YI)	Yes	No	NA
	e/ Preservation (Code H)		110	na .
2.1	Do sample preservation, collection and storage condition meet method requirement? If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler	X		
	was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached			
2.2	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days) <u> </u>	
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	
Note:	All holding times criteria were met.	<u> </u>	1	·····
			4	
3.0 GC/MS Instr	ument Performance Check (Code T)	Yes	No	NA
3.1	Are GC/MS Tuning and Mass Calibration forms present for DFTPP?	X		
3.2	Have all samples been analyzed within twelve hours of the tune?	x		
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".			
3.3	Have ion abundance criteria for DFTPP been met for each instrument used?	X		
	If no, all standards, blanks, field samples and QC samples are rejected "R".		<u> </u>	
Note:				

(Code X - Field Blank Contamination, Code Z - Method blank contamination)

		Yes	No	NA
4.1	Is a Method Blank Summary form present for each batch?	X		
4.2	Do any method/instrument/reagent blanks have positive results (TCL, and/or TIC)?		X	
4.3	Do any field equipment blanks have positive results (TCL, and/or TIC)?		х	
	Action: Positive sample results <5X (or 10X for phthalate contaminants) the blank concentration should be			
	qualified "U" and the detection limit elevated to the RL for estimate concentrations.			
4.4	If Level IV, review raw data and verify all detections for blanks were reported.	X		

Note: All blanks met criteria.

GC/MS In	itial Calibration (Code C)	Yes	No	NA			
5.1	Are Initial Calibration summary forms present and complete for each instrument used?	Х					
5.2	Are CCCs linear applying either %RSD < 30% and all other compounds <15% or >0.990?		X				
	If not, J(+)/UJ(-). In extreme cases, the reviewer may flag non-detects "R".						
5.3	Do any SPCC compounds have an RRF les than specification or any other compounds < 0.05 (use 0.01 for poor responders like amines and phenols)? If yes, $J(+)/R(-)$.		Х				
5.4	Is the lowest standard at the same concentration, or lower, as the RL reported? If not, elevate RL.	x					
5.5	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.	X					
Note:	The %RSD for 4-nitrophenol (18.7%), 4,6-Dinitro-2-methylphenol (25.0%) and dinoseb (25.9%) were outside evaluation criteria (15%). These						
	analytes were nondetect and qualified estimated (UJ) in validated samples SED-SA2-GMCS-2 and SED-SA2-GMCS-9.						

6.0 Continuin	g Calibration (Code C)	Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?	X		
6.2	Has a continuing calibration standard been analyzed every 12 hours?	X		
6.3	Have all SPCCs and CCCs met method specifications? If not, comment in report, proceed to 6.4.	X		
6.4	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration RRF outside QC limits (%D < 20%)?	X		
	If yes, a marginal increase in response >20% then $J(+)$ only; a decrease in response then $J(+)/UJ(-)$. For %D > 50%, flag R.			
6.5	Do any compounds have an RRF < 0.05 (use 0.01 for poor responders)? If yes, J(+)/R(-).		X	
6.6	If Level IV, calculate a sample of RFs and %Ds from ave RF to verify correct calculations.	X		

Note:

Continuing calibration %Ds associated with the validated samples were outside evaluation criteria (20%) as listed in the table below. The analytes with %Ds above evaluation criteria indicating a high bias were nondetect in the validated samples; therefore, no qualification of data was required.

CCV (Date)	Analyte	%D
9/12/2008	Nitrobenzene	26.5
9/12/2008	Isophorone	26.1
9/12/2008	2,4-Dichlorophenol	21.4
9/12/2008	1,2,4-Trichlorobenzene	20.8
9/12/2008	4-Chloro-3-methylphenol	25.0
9/12/2008	2,4,6-Trichlorophenol	23.3
9/12/2008	2,4,5-Trichlorophenol	23.5
9/12/2008	4-Bromophenyl phenyl ether	22.7
9/12/2008	Hexachlorobenzene	21.7
9/12/2008	Dinoseb	21.2

urrogate	Recovery (Code S)			Yes	No	NA
7.1	Are all samples listed on the a	opropriate Surrogate Recovery S	Summary Form ?	Х		
7.2	Are surrogate recoveries within	acceptance criteria specified in	the QAPP for all samples and method blanks?		x	
7.3	Are more than one of either fra		Х			
7.4	If Yes in Section 7.3, are these			x		
7.5	If Yes in Section 7.3, is any sar			X		
		ay unacceptable recoveries in the neutrals are assessed separately	e MS and/ or diluted samples, then no reanalysis			
	> UCL	10% to LCL	< 10%			
	Positive J	J	J			
	Non-detect None	UJ	R			

Surrogate recovery for phenol-d₅ (42%) was outside evaluation criteria (43-110%) in sample SED-SA2-GMCS-2. Since only one acid fraction surrogates was outside criteria in sample SED-SA2-GMCS-2 and National Functional Guidelines indicates to qualify data if two or more surrogates per SVOC fraction are outside criteria; therefore, no qualification of the SVOC data was required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Recovery - Code M, RPD - Code D)

		Yes	No	ΝA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
8.2	Are MS/MSDs analyzed at the required frequency not to exceed twenty field samples for each matrix?	X		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria provided by the laboratory?		x	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction			
	with other QC criteria and determine the need for qualification of the data for samples from the same			
	site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note:

Sample SED-SA2-GMCS-9 was spiked and analyzed for SVOCs. Thirty-six out of 65 MS recoveries and one out of 65 MSD recoveries were outside evaluation criteria and were not listed individually in sample SED-SA2-GMCS-9. Organic data is not qualified due to MS/MSD recoveries alone, LCS recoveries were within evaluation criteria; therefore, no qualification of data was required.

9.0 Laborator	ry Control Sample (LCS/LCSD) (Recovery - Code L, RPD - Code E)	Yes	No	NA
9.1	Is an LCS recovery form present?	X		
9.2	Is LCS analyzed at the required frequency for each matrix?	X		
9.3	Are all LCS %Rs (and RPDs) within acceptance criteria?	X		
	Action for specific compound outside the acceptance criteria: %R>UCL, J(+) only; <lcl, "j"="" (+="" <30%="" be="" failures="" flagged="" j(+)="" only)<="" r(-).="" rpd="" should="" td="" uj(-);=""><td></td><td></td><td></td></lcl,>			
9.4	If Level IV, verify the % recoveries are calculated correctly.	X		

Note: All LCS recoveries were within evaluation criteria.

	tandards (Code I)		***************************************		Yes	No	NA_
10.1		· /		ower QC limits for each continuing	X		
	Area	>+100%	Area < -50%	Area < -10%			
	Positive J		J	J			
	Non-detect Nor	ne	UJ	R			
Note:							
				d to the mid-point initial calibration,			
	sample to continuing calib	ration. Thus, if all	other QC specifications are	e met for a given sample, using infor	med		
			ose not to flag individual sa				
10.2	Are retention times of inte	rnal standards with	nin 30 seconds of the associ	ated calibration standard?	χ		
				positives or negatives exist. For shif	t of		
	a large magnitude, the revi	ewer may consider	r partial or total rejection of	the data for non-detects in that			
	sample/fraction.						
Note:	Internal standard area counts ar	nd retention times wer	e within evaluation criteria.				
TCL Iden	tification (Code W)				Yes	No	NA
11.1	Is the relative retention tim	ne (RRT) of each re	eported compound within 0	.06 RRT units of the standard RRT			
11.1	the continuing calibration		- F		x		
11.2			nt in the standard mass spec	trum also present in the sample mass			
	spectrum; and do sample a	and standard relativ	ve ion intensities agree with	in 30%?	x		
Note:	***************************************						
TO THE	O	Detection limite	(Codo V)		Yes	No	NA
	Quantitation and Reported				X	110	717.7
12.1	Are RLs used consistent with those specified in the QAPP? Are these limits adjusted to reflect dilutions and/ or percent solids as required?				X		
12.3				sent in the sample spectrum?			x
12.3	Are any positives reported	that exceed the li	near range of the instrument	7 If yes than flag "I"		х	
12.5	If Level IV. calculate a sar	mple of positive re	sults to verify correct calcul	ations	x		
Note:	1		· · · · · · · · · · · · · · · · · · ·			<u> </u>	
	licate Samples (Code F)			5	Yes	No	NA
		1	VC12		103		
13.1	Were any field duplicates					X	
13.2	Were all RPD or absolute					L	X
			esuits, however the data val	idator should provide a qualitative			
	assessment in the data val	idation report.					
Note:							
	nleteness						
Data Com	P.441-1-00				Yes	No	NA
Data Com							
Data Com	Is % completeness within	the control limits?	(Control limit: Check QA)	PP or use 95% for aqueous sample, 9)0% x	1	
14.1 14.2		the control limits?	(Control limit: Check QA)	PP or use 95% for aqueous sample, 9	90% x		
14.1	Number of samples:				90% x		
14.1 14.2	Number of samples: Number of target compou	nds in each analys		3	90% x	<u> </u>	
14.1 14.2 14.3	Number of samples:	nds in each analys l and not reported:	is:	3 65	90% x		

DATA VALIDATION WORKSHEET HERBICIDES ANALYSIS

Reviewer:	Tony Sedlacek	Project Name:	Sauget - Area 2 Site R GMCS
Date:	1/22/2009	Project Number:	21561993.00001
Laboratory	Severn Trent Laboratory - Savannah	SDG No.:	SAS057
•		Review Level:	Level IV

Major Anomalies:

No data was rejected.

Minor Anomalies:

No analytes required qualification based on this data validation.

Field IDs: SED-SA2-GMCS-2

> SED-SA2-GMCS-9 SED-SA2-GMCS-5-EB

1.0 Chain of Custody/Sample Condition

		Yes	No	. NA
1.1	Do Chain-of-Custody forms list all samples analyzed?	x		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x		
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of			
	samples, analytical problems or special circumstances affecting the quality of the data?		x	

Note:

Although not indicated in the laboratory case narrative, MS/MSD and LCS recoveries were outside evaluation criteria. These issues are further addressed in the appropriate sections below. The cooler receipt form did not indicate any problems.

2.0 Holding Time/ Preservation (Code h)

		Yes	No	NA
2.1	Do sample preservation, collection and storage condition meet method requirement?	x		
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler			
	was elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".			
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached	1		
	Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		X	<u> </u>
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days			
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X	

Note:

All holding time criteria were met.

3.0 Blanks (Method Blanks and Field Blanks)

(Code x - Field Blank Contamination, Code z - Method blank contamination)

			Yes	No	NA
	3.1	Is a Method Blank Summary form present for each batch?	х		
	3.2	Do any method blanks have positive results?		X	
	3.3	Do any field/rinse/equipment blanks have positive results?		x	
Г		Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated	1		
		to the RL for estimate (laboratory "J" flagged) concentrations.			
	3.4	If Level IV, review raw data and verify all detections for blanks were reported.	X		

Note:

All blank criteria were met.

4.0 Initial Calibration (Code r)

		Yes	No	NA
4.1	Are Initial Calibration summary forms present and complete for each instrument used?	X		
4.2	Are calibration factors stable (%RSD values < 20% or >0.99) over the concentration range of the instrument	X		
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
4.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.	Х		

Note:

5.0 Continuing Calibration (Code c)

		Yes	No	NA
5.1	Are Continuing Calibration Summary forms present and complete?	X		
5.2	Has a continuing calibration standard been analyzed every 12 hours?	x		
5.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and			
	continuing calibration CF outside QC limits (%D < 20%)?	x	000000	
	If yes, a marginal increase in response >20% then J(+) only; a decrease in response then J(+)/ UJ(-). For %D >			
	50%, flag R.			
5.5	If Level IV, calculate a sample of CFs and %Ds from ave CF to verify correct calculations.	X		

Note:

The %Ds for the continuing calibration standards associated with the validated samples were outside evaluation criteria: therefore, the grand mean exception was applied to the associated standards. The rule is described in Method SW-846 and states that when on or more compounds fails to meet acceptance criteria, the initial calibration (ICAL) may be used for quantitation if the average percent difference (%D) of all the compounds in the CCV is less than or equal to 15%.

A calculation of the %D for each target compound and a calculation of the grand mean for specific CCVs was performed. All grand mean calculations were less than 15% therefore, no qualification of data was required. Recalculation of the RF and %D for one compound per standard was completed, and no errors in calculation were noted.

6.0 Surrogate Recovery (Code s)

					Yes	No	NA
6.1	Are all sampl	es listed on the ap	propriate Surrogate Recovery S	биттагу Form ?	X		
6.2	Are surrogate	recoveries within	acceptance criteria specified in	the QAPP for all samples?	x		
6.3	If No in Secti	If No in Section 6.2, were these sample(s) or method blank(s) reanalyzed?				х	
6.4		•	•				
	If No in Section 6.3, is any sample dilution factor greater than 10? (Surrogate recoveries may be diluted out.)		diluted out.)		x		
		> UCL	10% to LCL	< 10%			
	Positive	J	J	J			
	Non-detect	None	ŪJ	R			

Note: All surrogate recoveries were within evaluation criteria.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
7.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	X		
7.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty			
1-2	for each matrix?	ж		
7.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?		Х	
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with			
	other QC criteria and determine the need for qualification of the data for samples from the same site/matrix.			
	Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note:

Sample SED-SA2-GMCS-9 was spiked and analyzed for herbicides. The MS/MSD recoveries for MCPA (118/117%) were outside evaluation criteria (54-110%) in sample SED-SA2-GMCS-9. The MSD recovery for 2,4-D (115%) was outside evaluation criteria (55-112%) in sample SED-SA2-GMCS-9. Organic data is not qualified due to MS/MSD recoveries alone, the LCS recoveries for MCPA were also above evaluation criteria, MCPA was nondetect in all samples; therefore, no qualification of data was required.

8.0 Laboratory Control Sample (LCS/LCSD) (Code I - LCS recovery Code e - RPD)

x		
x		
	х	
X		
	X	X

Note: The LCS recoveries for MCPA (113%) and (119%) were outside evaluation criteria (54-110%) in LCS samples 680-117383/10-A and 680-117439/7-A, respectively.

The compound MCPA was nondetect in all samples; therefore, no qualifications of data was required.

9.0 TCL Identification (Code w)

_			Yes	No	NA	Ĺ
	9.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the				
		continuing calibration?	x	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
•	Note:					

10.0 TCL Quantitation and Reported Detection limits (Code p)

		Yes	No	NA
10.1	Are RLs used consistent with those specified in the QAPP?	Х		
10.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?	Х		
10.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".		X	
10.4	If Level IV, calculate a sample of positive results to verify correct calculations	X		
Note:				

11.0 Field Duplicate Samples (Code f)

11.1 Were any field duplicates submitted for herbicide analysis?

11.2 Were all RPD or absolute difference values within the control limits outlined in the QAPP?

Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a qualitative assessment in the data validation report.

Note:

. . . .

12.0 Data Completeness

			Yes	No	NA
12.1	Is % completeness within the control limits? (Control limit: Check QA	APP or use 95% for aqueous sample, 90% for	X		
12.2	Number of samples:	3			
12.3	Number of target compounds in each analysis:	10			
12.4	Number of results rejected and not reported:	0			ļ
1	% Completeness = $100 \times ((12.1 \times 12.2) - 12.3) / (12.1 \times 12.2)$				
	% Completeness	100			

DATA VALIDATION WORKSHEET PESTICIDES ANALYSIS

Reviewer:	Tony Sedlacek Project Nam	ie: Sauget	- Area 2 Site	R GMCS			
Date:		er:	**************************************				
Laboratory	Severn Trent Laboratory - Savannalı SDG N	o.:	SAS057				
_	Review Lev	el:	Level IV				
Major Anom	nalies:						
	No data was rejected.						
Minor Anom	alies:						
	Samples were not qualified due to this data validation.						
Field IDs:	SED-SA2-GMCS-2						
	SED-SA2-GMCS-9						
	SED-SA2-GMCS-5-EB						
1.0 Chair of	Custody/Sample Condition						
1.0 Chain oi	Custody/sample Condition	Yes	No	NA			
1.1	Do Chain-of-Custody forms list all samples analyzed?	х					
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	x					
1.3	Do the Traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition						
	samples, analytical problems or special circumstances affecting the quality of the data?	x	100.000				
Note:	Although not indicated in the laboratory case narrative, surrogates were diluted out and not recovered in sample SED-SA2-GMCS-2.	Continuing cal	bration %Ds				
11010.							
	were outside evaluation criteria, however the grand mean exception was applied to the continuing calibration standards. These issues	ire discussed i	arther in the				
	appropriate sections below. The cooler receipt did not indicate any problems.						
2.0 Holding	Time/ Preservation (Code h)	Yes	No	NA			
2.1	Do sample preservation, collection and storage condition meet method requirement?	x					
	If samples were not on ice or the ice was melted upon arrival at the laboratory and the temperature of the cooler w	vac					
	elevated (> 10 °C), then flag all positive results with a "J" and all non-detects "UJ".	, as					
2.2	Have any technical holding times, determined from sampling to date of analysis, been exceeded? (See attached						
2.2	Holding Time Table for sample holding time) If yes, J(+)/UJ(-).		x				
	Triding Time Table for Sample Holding that you, set yield you		\$200000 15 0000004				
	Extraction: Soil/Sediment 14 days - aqueous 7 days Analysis: 40 days						
2.3	Have any technical holding times grossly (twice the holding time) been exceeded? If yes, J(+)/R(-).		X				
Note:	All holding times criteria were met.						
	(Method Blanks and Field Blanks)						
J.0 Dianks	(Code x - Field Blank Contamination, Code z - Method blank contamination	n)					
	(Code x xield blank contamination, code b 1,200,000 blank contamination	Yes	No	NA			
3.1	Is a Method Blank Summary form present for each batch?	x					
3.2	Do any method blanks have positive results (TCL)?	100000000000000000000000000000000000000	x				
3.3	Do any field/rinse/equipment blanks have positive results (TCL)?		x				
	Action: Positive sample results <5X the blank concentration should be qualified "U". The result should be elevated as the concentration of the concentration	ed	-				
	to the RL for estimate (laboratory "J" flagged) concentrations.						
3.4	If Level IV, review raw data and verify all detections for blanks were reported.	х					

Note:

All blank criteria were met.

4.0 GC/EC	CD Instrument Performance Check (Code b)	Yes No	NA
4.1	Are Endrin and 4,4'-DDT breakdown forms present?	X	
4.2	Have all samples been analyzed within twelve hours of the performance check sample?	X	
	If no, the data for the affected standards, blanks, field samples or QC samples are rejected "R".		
4.3	Have percent breakdown criteria (15%) for endrin and 4,4'-DDT been met?	x	
	If no, all standards, blanks, field samples and QC samples are rejected "R".		

Note:

5.0 Initial Calibration (Code r)

		Yes	No	NA.
5.1	Are Initial Calibration summary forms present and complete for each instrument used?	x		
5.2	Are response factors stable (%RSD values < 20% or >0.995) over the concentration range of the instrument	X		
	If not, J(+)/ UJ(-). In extreme cases, the reviewer may flag non-detects "R".			
5.3	If Level IV, recalculate a sample of RRFs and %RSDs to verify correct calculations are being made.	X		

Note:

6.0 Continuing Calibration (Code c)

		Yes	No	NA
6.1	Are Continuing Calibration Summary forms present and complete?			х
6.2	Has a continuing calibration standard been analyzed every 12 hours?			x
6.3	Do any compounds have a % difference (or % drift for quantitation from a curve) (%D) between initial and continuing calibration CF outside QC limits (%D < 15%)?	х		
	If yes, a marginal increase in response >15% then $J(+)$ only; a decrease in response then $J(+)/UJ(-)$. For %D > 50%, flag R.			
6.4	If Level IV, calculate a sample of CFs and %Ds to verify correct calculations.	(S) (X)		

Note:

The %Ds for the continuing calibration standards associated with the validated samples were outside evaluation criteria; therefore, the grand mean exception was applied to the associated standards. The rule is described in Method SW-846 and states that when on or more compounds fails to meet acceptance criteria, the initial calibration (ICAL) may be used for quantitation if the average percent difference (%D) of all the compounds in the CCV is less than or equal to 15%.

A calculation of the %D for each target compound and a calculation of the grand mean for specific CCVs was performed by the laboratory. All grand mean calculations were less than 15% therefore, no qualification of data was required. Recalculation of the RF and %D for one compound per standard was completed, and no errors in calculation were noted.

7.0 Surrogate Recovery (Code s)

					Yes	No	NA
7.1	Are all sample	es listed on the ap	propriate Surrogate Recovery S	Summary Form ?	X		
7.2	Are surrogate	recoveries within	acceptance criteria specified i	n the QAPP for all samples?		x	
7.3	If No in Section	on 7.2, were thes	e sample(s) or method blank(s)	reanalyzed?		x	
7.4							
	If No in Section	on 7.3, is any san	ple dilution factor greater than	10? (Surrogate recoveries may be diluted	out.) x		
		> UCL	10% to LCL	< 10%			
	Positive	J	J	J			
	Non-detect	None	UJ	R			

Note: Surrogates were diluted out and not recovered in sample SED-SA2-GMCS-2, no qualification of data was required.

8.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD) or one MS with a Sample Duplicate (Code m - recovery, Code d - RPD)

		Yes	No	NA
8.1	Is a Matrix Spike/Matrix Spike Duplicate recovery form present?	х		
8.2	Are MS/MSDs analyzed at the required frequency of one matrix spike per ten samples and a duplicate per twenty for each matrix?	X		
8.3	Are all MS/MSD %Rs and RPDs within acceptance criteria Specified in the QAPP?	x		
	Using informed professional judgment, the data reviewer should use the MS and MSD results in conjunction with other QC criteria and determine the need for qualification of the data for samples from the same site/matrix. Recoveries <10% may require rejection. RPD failures may be flagged "J" (+ only)			

Note: Sample SED-SA2-GMCS-9 was spiked and analyzed for pesticides.

9.0 Laboratory Control Sample (LCS/LCSD) (Code 1 - LCS recovery Code e - RPD)

		Yes	No	NA
9.1	Is an LCS recovery form present?	x		
9.2	Is an LCS analyzed at the required frequency of one per twenty field samples for each matrix?	X		
9.3	Are all LCS %Rs and RPDs within acceptance criteria specified in the QAPP?	X		
 9.4	If Level IV, verify the % recoveries are calculated correctly.	X		
	Action for specific compound outside the acceptance criteria: %R>UCL,			
	J(+) only; <lcl, "j"="" (+="" <30%="" be="" failures="" flagged="" j(+)="" only)<="" r(-).="" rpd="" should="" td="" uj(-);=""><td></td><td></td><td>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</td></lcl,>			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Note: All LCS recoveries were within evaluation criteria.

10.0 TCL Id	lentification (Code w)	Yes	No	NA
10.1	Is the relative retention time (RRT) of each reported compound within 0.06 RRT units of the standard RRT in the			
	continuing calibration?	X		

Note:

11.0 TCL 0	Quantitation and Reported Detection limits (Code p)	Yes	No	NA
11.1	Are RLs used consistent with those specified in the QAPP?	X		
11.2	Are these limits adjusted to reflect dilutions and/ or percent solids as required?	x		
11.3	Are any positives reported that exceed the linear range of the instrument? If yes, than flag "J".	х	100	
11.4	If Level IV, calculate a sample of positive results to verify correct calculations	X		
Matas	The state of the s	-conied		

Note: The analytes that exceeded the calibration range of the instrument were analyzed at a 25X dilution; therefore, no qualification of data was required.

12.0 Field D	uplicate Samples (Code f)	Yes	No	NA
12.1	Were any field duplicates submitted for analysis?		х	
12.2	Were all RPD or absolute difference values within the control limits outlined in the QAPP?			X
	Action: No qualifying action is taken based on field duplicate results, however the data validator should provide a			
	qualitative assessment in the data validation report.	<u> </u>		

Note:

13.0 Data Completeness

			Yes	No	NA
13.1	Is % completeness within the control limits? (Control limit: Check QAI	PP or use 95% for aqueous sample, 90% for	х		
13.2	Number of samples:	3			
13.3	Number of target compounds in each analysis:	21			
13.4	Number of results rejected and not reported:	0			
	% Completeness = 100 x ((13.1 x 13.2) - 13.3) / (13.1 x 13.2)				
	% Completeness	100			

Note:

DATA VALIDATION WORKSHEET - Level III Review Inorganic - ICP, ICP-MS, GFAA, and CVAA

Reviewer:	Tony Sedlacek	Project Name:	Sauget - Area 2 Site R GMCS
Date:	1/22/2009	Project Number:	21561993.00001
Laboratory	Severn Trent Laboratory - Savannah	SDG No.:	SAS057
		Review Level:	Level IV
Major Anomolies:			
	No data was rejected.		
Minor Anomolies:			
	Analytes were qualified due to MS/MSD, MSD recoveries and serial dilutions.		
Field IDs:	SED-SA2-GMCS-2		
	SED-SA2-GMCS-9		

1.0 Chain of Custody/Sample Condition/Raw Data			ICP		ICP-MS		S	GI	FAA	C	/AA-	·Hg	
•		Yes	No	NA	Yes	No 1	VA Y	es l	No N	A Yes	No	N	ĬΑ
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	x								х			
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was main	X								x			
1.3	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems												
	with sample receipt, condition of samples, analytical problems or special												
	circumstances affecting the quality of the data?	х						8			x		
1.4		100											
	Does sample preservation, collection and storage meet method requirement? (water												
	samples: with Nitric Acid to pH < 2, and soil/sediment samples: $4^{\circ}C \pm 2^{\circ}C$)	x								x			
1.5	Are the digestion logs present and complete with pH values, sample weights,												
	dilutions, final volumes. % solids (for soil samples), and preparation dates? For any												
	missing or incomplete documentation, contact the laboratory for	(Contract)											

Note:

Although not indicated in the laboratory case narrative, metals were detected in the method blank. Metals MS/MSD and MSD RPDs were outside evaluation criteria.

The serial dilution %D for lead was outside evaluation criteria for sample SED-SA2-GMCS-2. These issues are further discussed in the appropriate sections below.

The cooler receipt form did not indicate any problems.

SED-SA2-GMCS-5-EB

explanation/resubmittal.

.0 Holding Time (Code h)				IC	CP-MS	5	GFA	λA	CVAA	Hg	
		Yes	No NA	Yes	No N	IAY	es No	NA.	Yes No)	NA
2.1	Have any technical holding times, determined from date of collection to date of	f									
	analysis, been exceeded? (Hg: 28days, other metals: 6 months) See attached	1									
	Holding Time Table.		X						X		
	Action: J(+)/UJ(-). If the holding times are grossly exceeded (twice the holding time	2									
***************************************	criteria)										
	J(+)/R(-).										

Note:

All samples were analyzed within holding time criteria.

3.0 Instrument Calibration	Instrument Calibration (Code c)							CP	I(CP-MS	S	GF.	λA	CV	'AA-	Hg	
						Y	es N	lo N	A Yes	No 1	VA Y	es N	o NA	Yes	No		NA
II.	Are sufficient standard					90083											
	one standard; GFAA: b	lank + thre	e standards; C`	VAA: blank + f	ive standards)		S							X.			
3.2	Are the correlation coe	fficients >	0.995? (for GF	AA and CVAA) Action: J(+)/U	JJ(-).								X			-
3.3	Was an initial calibra	tion verifi	cation (ICV)	analyzed at the	e beginning of	each											
	analysis? Action: If r	nitial calibration verification (ICV) analyzed at the beginning of Action: If no, use professional judgment to determine affect on the															
	and note in reviewer na	ote in reviewer narrative.												x			
3.4	Was continuing calibra	ation verific	cation (CCV) p	erformed every	10 analysis or e	every			7577								
	2 hours, whichever is	more frequ	ent? Action:	If no, use prof	essional judgme	nt to			6.6								
	determine affect on the	data and n	ote in reviewer	narrative.										x			
3.5	Ara all calibration ata	ndord noro	ant ranavarias	(ICV and CCV	D within the co	7,673	X		100.00				+	A.			
	Are all calibration sta				/) within the co	muoi											
	i ' '	its? Mercury (80%-120%) and other Metals (90%-110%).												X			
	Action:	R(+/-)	J(+)/UJ(-)	J(+)	R(+)									1000			
	Mercury	Mercury < 65% - 65% - 79% 121% - 135% > 135%															
	Other Metals	Other Metals < 75% 75% - 89% 111% - 125% > 125%															

Note:

4.0 Blanks (Code o - Calibration blank failure, Code p - Preparation blank failure, Code x - Field blank failure)

			ICP	,	I	CP-M	S	C	FA.	A	CV	AA-	Hg
		Yes	No	NA	Yes	No 1	NA.	Yes	No	NA	Yes	No	NA
4.1	Were preparation blank (PB) prepared at the appropriate frequency (one per 20 samples, per batch, per matrix and per level)?	X									x		
4.2	Are there reported PB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.	х										x	
4.3	Were initial calibration blanks (ICB) analyzed? Action: If no, use professional judgment to determine affect on the data note in reviewer narrative.	х									х		
4.4	Were continuing calibration blanks (CCB) analyzed after every 10 samples or every 2 hours whichever is more frequent? Action: If no, use professional judgment to determine affect on the data to note in reviewer narrative.	Astrono Section									X		
4.5	Are there reported ICB or CCB values > + IDL? Action: If yes, action level of 5 times the blank value are determined for positive and negative blank values.		х					:				x	
4.6	Are there samples with concentrations less than five times the highest level in associated blanks? Action: If yes, U at reported concentration.		х									x	
4.7	Are there samples with non-detect results or with concentrations less than five times the most negative value in associated blanks? Action; If yes, J(+)/UJ(-).		x									x	
NT-4													

Note:

The compounds calcium (9.5 mg/kg), iron (2.5 mg/kg), lead (0.34 mg/kg) and selenium (0.22 mg/kg) were detected in method blank MB 680-116648/26-A. The compounds

calcium (8.5 mg/kg), iron (2.8 mg/kg), lead (0.33 mg/kg) and magnesium (1.2 mg/kg) were detected in method blank MB 680-116776/21-A.

The compounds calcium (0.26 mg/L), cobalt (0.0014 mg/L), magnesium (0.044 mg/L) and zinc (0.0089 mg/L) were detected in the equipment blank SED-SA2-GMCS-5-EB.

Analytical data was reported at concentrations greater than five times (5X) the associated blank concentration; therefore, did not require qualification.

5.0 ICP Interference Check	Sample (ICS) (Code n)		ICP	10	CP-N	1S	GFAA	CVAA-Hg	
		Yes	No N	IA Yes	No	NA	Yes No NA	Yes No	NA
5.1	Was ICS AB analyzed at beginning of each ICP run (or at least twice every 8 hours), and at the beginning or once every 8 hours (whichever is more frequent) for ICP-								
	MS?	X			ļ		4		
5.2	Are the ICS AB recoveries within 80% - 120%?	X		3.0					
5.3	Are the results for unspiked analytes (in ICS A) < + IDL?	X							
5.4	If not, are the associated sample Al, Ca, Fe, and Mg concentrations less than the level in the ICS?			x					
	Action: Not Spiked Analytes Spiked analytes (ICS AB analytes) <-IDL > IDL <50% 50% ~79% > 120% UJ(-) J(+) R(+/-) J(+)/UJ(-) J(+)								

Note:

6.0 Laboratory Control Sa	.0 Laboratory Control Sample (LCS) (Code l - Recovery, Code e - RPD)						1S	(GFA.	7	CVAA-	Hg
		Yes	No	NA	Yes	No	NΑ	Yes	No	NA Y	es No	NA
6.1	Was an LCS prepared and analyzed at the correct frequency (one per 20 samples, pe	r							Í			
	batch, per matrix and per level)? Action: If no, J(+) any sample not associated with	1										1
	LCS results.	Х									x	
6.2	Is any LCS recovery outside the control limits? (Aqueous limits: 80% - 120%	-	10.00								18.10	
	except Ag and Sb; Solid limits: as per EPA-EMSL/LV)		x								x	
	Action: Solid Aqueous									1		
	<pre>< LCL > UCL < 50% 50% - 79% > 120%</pre>											
	J(+)/UJ(-) $J(+)$ $R(+/-)$ $J(+)/UJ(-)$ $J(+)$				j i					- 1	100	

7.0 Laboratory Dupl	Laboratory Duplicates (Code k)				I	CP-M	s	G	FA.	A	CV	AA-	-Ig
		Yes	No	NA	Yes	No l	NA Y	es.	No	NΑ	Yes	No	NA
7.1	Were Laboratory duplicates prepared and analyzed at the correct frequency (one per 20 samples, per batch, per matrix and per level)? Action: If no, J(+), with professional judgment, analytes not associated with Duplicate results.		x									x	
7.2	Was a field blank used for the duplicate analysis? Action: If yes, J(+) with professional judgment. Note in worksheet.			x									X
7.3	Are all analyte duplicate results within control? (RPD values < 20% or difference < ± PQL for aqueous, and RPD < 35% or difference < ± 2 X PQL for solids)? Action: If no, J(+).	5888V88996		х									x
	Note: RPD criteria is used when both sample and duplicate results are > 5 X IDL.												

Note:

8.0 Spike Sample Analysis	Spike Sample Analysis -Pre-Digestion (Code m - Recovery, Code d - RPD)					ICP		IC	P-MS		GFA	A	CV	AA-	Hg
					Yes	No	NA ۲	l'es	No N	A Yes	No	NA	Yes	No	NA
8.1	samples, per ba	atch, per matrix and p	d analyzed at the correct for level)? Action: If no, if the matrix spike results.		9990000000								X		
8.2	professional ju	i dgment. Note in w spike analysis may b	e MS analysis? Action orksheet. e performed on a field bla	. , , ,		х								х	
8.3	recoveries with		centration < 4 x spike conf 75-125%? (No control listentration.) 30% < %R < 74% J UJ			х							X		

Note:

Sample SED-SA2-GMCS-9 was spiked and analyzed for metals and mercury. MS/MSD recoveries were outside evaluation criteria (75-125%) for aluminum (74/469%),

calcium (1370/356%) and manganese (4/179%) and MSD recovery for magnesium (205%) and MS/MSD RPD for aluminum (62), calcium (107), magnesium (49)

and manganese (60) with criteria (>20) in sample SED-SA2-GMCS-9. Qualifications due to MS/MSD recoveries are listed in the table below.

Analytes with sample concentrations greater than 4X the spike concentrations did not require evaluation or qualification.

Field ID	Analyte	Code	Qualification
SED-SA2-GMCS-9	Aluminum	m	J
SED-SA2-GMCS-9	Calcium	m	J
SED-SA2-GMCS-9	Magnesium	m	J
SED-SA2-GMCS-9	Manganese	m	J

) Instrument Detect	ion Limits (IDL)		ICP		ICI	P-MS		GFA.	A	CVA	A-Hg	
		Yes	No	ΝA	Yes 1	No N	A Yes	No	NA	Yes N	lo l	NA
9.1	Are all IDL equal to or less than the reporting limits specified?	X			33000					x		
Note:	The reporting limits sere determined based on soil moisture.											
.0 ICP Serial Dilution	ons (Code s)	[ICP		ICI	P-MS		GFA.	A I	CVA	A-Hg	
.o ici beriai biidi.	ous (Couc 3)	Yes								Yes N		NA
10.1	Were serial dilutions performed?	х			0.000							
10.2	Was a five-fold dilution performed?	x					7					
10.3	Did the serial dilution results agree within 10% for analyte concentration > 50 x th	е										
	IDL in the original sample? If no, J(+).			x								
Note:	The laboratory performed the serial dilution of samples SED-SA2-GMCS-2 and SED-SA2-GMCS-9.	The %	D for	lead ((17.1%)	betwe	en the p	arent a	and sea	rial dilut	ion	
	for sample SED-SA2-GMCS-2 was outside evaluation criteria (10%). Lead was detected and qualifie	d esitm	ated (J) in	sample S	SED-S	A2-GM	CS-2.				
.0 Field Duplicate S	camples (Code f)		ICF	,	IC)	P-MS	. T	GFA.	A I	CVA	A-Hg	
o riem Duphcate 5	amples (Code I)	Yes								Yes 1		NA
11.1	Were any field duplicates submitted for metal analysis?		x							9000099900000	x	
	Are all field duplicate results within control? (For aqueous sample, RPD values	<			98.3%							
11.2	35% or difference $< \pm 2 \times PQL$ and For solids, RPD $< 50\%$ or difference $< \pm 4 \times 10^{-2}$			x		ļ						x
Note:												
.0 Result Verification	on (Code (I))		ICF	,	IC	P-MS	. T	GFA	A I	CVA	A-Hg	
o Kesuji verincan	on (code Q)	Yes								Yes 1		NA
12.1	Were all results and detection limits for solid-matrix samples reported on a dry-	357 000										
12.1	weight basis?	X								х		
12.2	Were all dilution reflected in the positive results and detection limits?			x								х
Note:	Samples did not require a dilution.	**************************************	2.1		1		F 32522					
										•		
.0 Data Completene	SS											
13.1	Is % completeness within the control limits? (Control limit: Check QAPP or use	T										
13.1	95% for aqueous sample, 90% for soil sample)											
13.2	Number of samples:	3	1		0		0	- T		3		
13.2	Number of samples: Number of target compounds in each analysis:	22	4				0	-		1		
	Number of target compounds in each analysis: Number of results rejected and not reported:	0	4		0		0	1		0		
13.4		+	-		$\vdash \vdash \vdash$		-	\dashv		 		
	% Completeness = $100 \times ((13.1 \times 13.2) - 13.3) / (13.1 \times 13.2)$	100	4		###		##	4		100		
	% Completeness	100	<u>' L</u>		###		1111	7		100		



Data Tables

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	<u> </u>	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	2-Butanone (MEK)	10	ug/L	Ú	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Acetone	25	ug/L	U	:
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Benzene	1	ug/L		
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	1	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Bromoform	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Bromomethane	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Carbon Dioxide	58	ug/L	TBJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Chlorobenzene	22	ug/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Chloroethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Chloroform	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Chloromethane	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Dichloromethane	5	1 33, -	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Methyl N-Butyl Ketone	10		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Sulfur dioxide	5900	4 <u>V</u>	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Tetrachloroethene	1 1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Toluene	1	ug/L		
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	trans-1,2-Dichloroethene	1	ug/L	Ų	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Trichloroethene	1 1	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Vinyl chloride	1 1	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	VOCs	Xylenes, Total	2	ug/L	U	<u> </u>

	<u> </u>			Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	1,3-Dichlorobenzene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	1,4-Dichlorobenzene	0.7	ug/L	J	
Surface Water	i	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2,4-Dinitrophenol	47	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2-Chloronaphthalene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2-Chlorophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2-Methylnaphthalene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2-Methylphenol (o-Cresol)	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2-Nitroaniline	47	ug/L	Ų	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2-Nitrophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	2-Pentanone, 4-hydroxy-4- methyl-	19	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	3,6-Dioxa-2,4,5,7- tetrasilaoctane, 2,2,4	13	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	3-Nitroaniline	47	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	4-Bromophenyl Phenyl Ether	9.4		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	4-Nitrophenol	47	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-2	9/4/08	SVOCs	Acenaphthene	9.4		U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Acenaphthylene	9.4	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-2	9/4/08	SVOCs	Anthracene	9.4	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-2	9/4/08	SVOCs	Benzo(a)anthracene	9.4	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Benzo(a)pyrene	9.4	-	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U	

	<u> </u>			Sample					Lab	URS
Martin	C:4-		Samula ID	Sample	Croun	Chemical	Result	Units	Qualifiers	Qualifiers
Media	Site	Location	Sample ID	Date	Group		1		U	Qualifiers
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Benzo(g,h,i)perylene	9.4		U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Benzo(k)fluoranthene	9.4		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Bicyclo[2.2.2]oct-7-ene-2,5-dione	4.6		TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	bis(2-Chloroethoxy)methane	9.4		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	bis(2-Chloroethyl)ether	9.4		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	$\overline{}$	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Butane, 2-methoxy-2-methyl-	82	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Carbazole	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Chrysene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Dibenzofuran	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Diethyl Phthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Dimethyl Phthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Di-n-butylphthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Di-n-octylphthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Dinoseb	9.4	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Fluoranthene	9.4	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Fluorene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Hexachlorobenzene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Hexachlorobutadiene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Hexachloroethane	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Isophorone	9.4	ug/L	U	
Surface Water	Ì	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Isoquinoline, 1,2,3,4- tetrahydro-6-metho	7.6	ug/L	TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Naphthalene	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Nitrobenzene	9.4	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-2	9/4/08	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-2	9/4/08	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	P-Chloroaniline	14	ug/L	J	
Surface Water	RIVER		SW-SA2-GMCS-2	9/4/08	SVOCs	Phenanthrene	9.4	ug/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	Phenol	9.4	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-2	9/4/08	SVOCs	Phosphine oxide, triphenyl-	17		TJN	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	SVOCs	P-Nitroaniline	47	ug/L	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Pyrene	9.4	ug/L	Ų	-
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides		0.094		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	· ·	0.094	· · · · · · · · · · · · · · · · · · ·	Ú	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	4,4'-DDT	0.094		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Aldrin	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	alpha-BHC	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		alpha-Chlordane	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	beta-BHC	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	delta-BHC	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Dieldrin	0.094	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Endosulfan I	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Endosulfan II	0.094	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Endosulfan Sulfate	0.094	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Endrin	0.094	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Endrin Aldehyde	0.094	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Endrin Ketone	0.094	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	gamma-BHC (Lindane)	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	gamma-Chlordane	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Heptachlor	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Heptachlor Epoxide	0.047	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Methoxychlor	0.47	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Pesticides	Toxaphene	4.7	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides		0.48	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides	2,4,5-TP (Silvex)	0.48	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides	2,4-D	0.48	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides	2,4-DB	0.48	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides	Dalapon	9.6	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides	Dicamba	0.48	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides	Dichlorprop	0.48	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides	MCPA (2-Methyl-4- Chlorophenoxyacetic Acid)	120	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Herbicides		120	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Pentachlorophenol	0.24	ug/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08		Aluminum	1.1			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Aluminum (Dissolved)	0.2		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Antimony	0.02	mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Antimony (Dissolved)	0.02	mg/L	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Arsenic	0.01	mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Arsenic (Dissolved)	0.0023	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Barium	0.11	mg/L		
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Barium (Dissolved)	0.075	mg/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Beryllium	0.004	mg/L	Ų	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Beryllium (Dissolved)	0.004	mg/L	Ü	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Cadmium	0.005	mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Calcium	54	mg/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Calcium (Dissolved)	50	mg/L	В	·
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Chromium	0.0023	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Chromium (Dissolved)	0.01	mg/L	IJ	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Cobalt	0.0012	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Cobalt (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Copper	0.0034	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Copper (Dissolved)	0.0023	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Iron	1.3	mg/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Iron (Dissolved)	0.031		J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Lead	0.005	mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Lead (Dissolved)		mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Magnesium	24			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Magnesium (Dissolved)	22			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Manganese	0.16			
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Manganese (Dissolved)	0.01		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Mercury	0.0002		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Nickel	0.0054	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Nickel (Dissolved)	0.0031	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Potassium	4.1	mg/L		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Potassium (Dissolved)	3.6	 		
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Selenium	0.01	mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Selenium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Silver	0.01	mg/L	U	
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water	<u> </u>	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Sodium	29			
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Sodium (Dissolved)	27			
Surface Water		Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Thallium	0.025		U	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Thallium (Dissolved)	0.025	mg/L	U	

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Vanadium	0.0059	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Vanadium (Dissolved)	0.003	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Zinc	0.017	mg/L	J	
Surface Water	RIVER	Station 2 - PDA2	SW-SA2-GMCS-2	9/4/08	Metals	Zinc (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	1,1,1-Trichloroethane	4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	2-Butanone (MEK)	0.93		J	U
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Acetone	25		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Benzene	0.43	_	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Bromoform	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Bromomethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Carbon Dioxide	62	ug/L	TBJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Chlorobenzene	8.5			
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Chloroethane	1	ug/L	Ü	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Chloroform	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Chloromethane	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Methyl N-Butyl Ketone	10		U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Tetrachloroethene	1 1	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Toluene	0.95		J	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	trans-1,3-Dichloropropene	1 1	ug/L	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	<u> </u>	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Trichloroethene	1	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	1,2,4-Trichlorobenzene	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	1,2-Dichlorobenzene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	1,3-Cyclopentadiene	7.7	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	1,3-Dichlorobenzene	9.4		U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	1,4-Dichlorobenzene	9.4	ug/L	U	
Surface Water	-	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	1-Chloro-1-methyl-1-silacyclo- 2,4-hexadi	5.7	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2,4,5-Trichlorophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2,4-Dichlorophenol	9.4	<u> </u>	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2,4-Dimethylphenol	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2,4-Dinitrophenol	47	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2,4-Dinitrotoluene	9.4	— <u>×</u> —	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2,6-Dinitrotoluene	9.4	<u> </u>	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2-Chloronaphthalene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2-Chlorophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2H-1-Benzopyran-2-one, 6- hydroxy-7-metho	4.2		TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2-Methylnaphthalene	9.4		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2-Methylphenol (o-Cresol)	9.4		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2-Nitroaniline	47		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2-Nitrophenol	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	2-Pentanone, 4-hydroxy-4-methyl-	12		TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U	
Surface Water	<u> </u>	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	3,6-Dioxa-2,4,5,7- tetrasilaoctane, 2,2,4	8.9	L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	3-Nitroaniline	47	<u> </u>	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	4,6-Dinitro-2-methylphenol	47		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U	<u> </u>

				Sample		I			Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	4-Nitrophenol	47	ug/L	U	
Surface Water			SW-SA2-GMCS-3	9/4/08	SVOCs	Acenaphthene	9.4	ug/L	C	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Acenaphthylene	9.4	ug/L	Ü	
Surface Water	1	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Anthracene	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Benzo(a)anthracene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Benzo(a)pyrene	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Benzo(k)fluoranthene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Benzyl Butyl Phthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	bis(2-Chloroethoxy)methane	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	bis(2-Chloroethyl)ether	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Butane, 2-methoxy-2-methyl-	51	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Carbazole	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Chrysene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Cyclotetrasiloxane, octamethyl-	4,1	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Dibenzo(a,h)anthracene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Dibenzofuran	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Diethyl Phthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Dimethyl Phthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Di-n-butylphthalate	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Di-n-octylphthalate	9.4	ug/L	Ü	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Dinoseb	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Fluoranthene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Fluorene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Hexachlorobenzene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Hexachlorobutadiene	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Hexachloroethane	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Indole, 3-benzoyl-	7.1	ug/L	TJN	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Isophorone	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Naphthalene	9.4	ug/L	U	

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	<u> </u>			Sample	*************				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	
Surface Water	ł	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		Nitrobenzene	9.4	ug/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		N-Nitroso-di-n-propylamine	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	P-Chloroaniline	19	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Phenanthrene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Phenol	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Phosphine oxide, triphenyl-	14	ug/L	TJN	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	P-Nitroaniline	47	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	SVOCs	Pyrene	9.4	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	4,4'-DDD	0.097	ug/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	4,4'-DDE	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	4,4'-DDT	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	Aldrin	0.049	ug/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	alpha-BHC	0.049		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	alpha-Chlordane	0.049	ug/L	IJ	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	beta-BHC	0.049	ug/L	Ü	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	delta-BHC	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	Dieldrin	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	Endosulfan I	0.049	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	Endosulfan II	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	Endrin	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	Endrin Aldehyde	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		Endrin Ketone	0.097	ug/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Pesticides	gamma-BHC (Lindane)	0.049		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		gamma-Chlordane	0.049		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		Heptachlor	0.049		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		Heptachlor Epoxide	0.049	··········	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		Methoxychlor	0.49		U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		Toxaphene	4.9		Ų	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Herbicides		0.48		U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	·	2,4,5-TP (Silvex)	0.48		U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Herbicides		0.48		U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Herbicides	1	0.48		U	
Surface Water	1	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Herbicides		9.6	-	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Herbicides		0.48	×	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Herbicides	Dichlorprop	0.48	ug/L	U	Ĺ

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Herbicides	MCPA (2-Methyl-4-	120	ug/L	U	
						Chlorophenoxyacetic Acid)	100	/1	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		MCPP	120	(
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08		Pentachlorophenol	0.24	· · · · · · · · · · · · · · · · · · ·	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Aluminum	1.6			
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Aluminum (Dissolved)	0.2	<u> </u>	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Antimony	0.02	-	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Antimony (Dissolved)	0.02	1 V	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Arsenic	0.0035		J	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Arsenic (Dissolved)	0.0051		J	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Barium		mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Barium (Dissolved)		mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Beryllium		mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Beryllium (Dissolved)		mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Cadmium	0.0009	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Calcium	55	mg/L		
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Calcium (Dissolved)	51		В	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Chromium	0.0034	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Chromium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Cobalt	0.0019	mg/L	J	
Surface Water	RIVER	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Cobalt (Dissolved)	0.01	mg/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Copper	0.0051	mg/L	J	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Copper (Dissolved)	0.02	mg/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Iron	1.9	mg/L		
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Iron (Dissolved)	0.05	mg/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Lead	0.0033	mg/L	J	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Lead (Dissolved)	0.005	mg/L	U	
Surface Water	I	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Magnesium	25	mg/L		
Surface Water	<u> </u>	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Manganese	0.17	mg/L		
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Manganese (Dissolved)	0.01		U	
Surface Water	L	Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Mercury	0.0002	mg/L	U	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Nickel	0.0031		J	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Nickel (Dissolved)	0.0023		J	
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Potassium		mg/L		
Surface Water		Station 3 - PDA3	SW-SA2-GMCS-3	9/4/08	Metals	Potassium (Dissolved)		mg/L		

MediaSiteLocationSample IDDateGroupChemicalResultUnitsQualSurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsSelenium0.01mg/LISurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsSelenium (Dissolved)0.01mg/LISurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsSilver (Dissolved)0.01mg/LISurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsSodium28mg/LSurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsSodium (Dissolved)26mg/LSurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsThallium0.025mg/LSurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsThallium (Dissolved)0.025mg/LSurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsThallium (Dissolved)0.0078mg/LSurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsVanadium0.0078mg/LSurface WaterRIVERStation 3 - PDA3SW-SA2-GMCS-39/4/08MetalsVanadium (Dissolved)0.004mg/L	fiers Qualific	Lab Qualifiers U U U U U U U U U U U U U U U U U U U	its Qualifier /L U /L U /L U /L U /L U	mg/L mg/L	<u> </u>		Group	1				l
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Selenium 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Selenium (Dissolved) 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Silver 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Silver (Dissolved) 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium 28 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L		U U U U U U U U U U U U U U U U U U U	1/L U 1/L U 1/L U	mg/L mg/L	<u> </u>		Gioub		CompleID		C:4-	88-315-
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Selenium (Dissolved) 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Silver 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Silver (Dissolved) 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium 28 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L		U U U	/L U //L U //L U	mg/L	0.01	ISolonium I	<u> </u>					
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Silver (Dissolved) 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Silver (Dissolved) 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium 28 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.005 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L		U	1/L U		0.01							
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Silver (Dissolved) 0.01 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium 28 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.0025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L		U	ı/L U								<u> </u>	
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium 28 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L	J J	U	<u> </u>			1			1			
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Sodium (Dissolved) 26 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L	J I		c/1			1						
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L	J I						***************************************					
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Thallium (Dissolved) 0.025 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L	J I											
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium 0.0078 mg/L Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L	j	1 0 1										
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Vanadium (Dissolved) 0.004 mg/L		J	·)								£	
	1					1			1	1		
		J										
Surface Water RIVER Station 3 - PDA3 SW-SA2-GMCS-3 9/4/08 Metals Zinc 0.022 mg/L	1			· · · · · · · · · · · · · · · · · · ·								
Odriace Water NIVER Oddien o 1 Bito Ott Cit College o 1 Bito Miletan		U			0.02							
Conface Water Trivery Cotation 4 BAT Cit Cite		U			1							
Odnace Water Triver Citation 4 1 Brei Cit Crite Citation 1 0, 100 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1		U			1							Surface Water
Outlace Water Trivery Oranging 1 Dry Or Greek		U			1							Surface Water
Journale Water MVER Jordan + 8 Bit OVY O/12 Gires Ovy O/2 Gires		U			1				SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	Surface Water
JOHNSON VAICE THEFT OF ONE OF ONE OF THE OF		U			1				SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	Surface Water
Contact Valor Tive Changer Contact Con		U			1	1,2-Dichloroethane	VOCs	9/4/08	SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	Surface Water
Journale Water MVER Oracion + 1 B/M OW O/12 Circle : O/1000 10		U			2	1,2-Dichloroethene (total)	VOCs	9/4/08	SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	Surface Water
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs 1,2-Dichloropropane 1 ug/L		U			1	1,2-Dichloropropane	VOCs	9/4/08	SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	
Touridoc Tracos Tarrel otation () Birth form of the original of the origina		J			1	2-Butanone (MEK)	VOCs	9/4/08	SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	Surface Water
Touride Water MVER Otation 4 - 1 DN4 OV ONE OWOO OV OO 1 MOST OV ONE OWOO		U				4-Methyl-2-pentanone (MIBK)	VOCs	9/4/08	SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	Surface Water
TOUTIAGE WATER TOTAL TOTAL TOTAL COMOCI		U		ug/L	25	Acetone	VOCs	9/4/08	SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	Surface Water
Touridge Water MVERT Otation + 1 D/14 Ot 10 Cition 1 Other 1000 100		U			1	Benzene	VOCs	9/4/08	SW-SA2-GMCS-4	Station 4 - PDA4	RIVER	Surface Water
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Bromodichloromethane 1 ug/L		U	,,	ug/L	1	Bromodichloromethane	VOCs	9/4/08	SW-SA2-GMCS-4	R Station 4 - PDA4	RIVER	
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Bromoform 1 ug/L		U		ug/L	1	Bromoform	VOCs	9/4/08	SW-SA2-GMCS-4	R Station 4 - PDA4	RIVER	
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Bromomethane 1 ug/L		U	,	ug/L	1	Bromomethane	VOCs	9/4/08	SW-SA2-GMCS-4	R Station 4 - PDA4	RIVER	
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Carbon Dioxide 61 ug/L T E		TBJN			61	Carbon Dioxide	VOCs	9/4/08	SW-SA2-GMCS-4	R Station 4 - PDA4	RIVER	
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Carbon Disulfide 2 ug/L		U	<u> </u>	ug/L	2	Carbon Disulfide	VOCs	9/4/08	SW-SA2-GMCS-4	R Station 4 - PDA4	RIVER	
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Carbon Tetrachloride 1 ug/L		U	,-	ug/L	1	Carbon Tetrachloride	VOCs	9/4/08	SW-SA2-GMCS-4			
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Chlorobenzene 1 ug/L		U	<u> </u>		1	Chlorobenzene	VOCs	9/4/08				
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Chlorodibromomethane 1 ug/L		U	<u> </u>	ug/L	1	Chlorodibromomethane	VOCs	9/4/08	SW-SA2-GMCS-4		·	
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Chloroethane 1 ug/L		U	<u> </u>	ug/L	1	Chloroethane	VOCs	9/4/08				
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Chloroform 1 ug/L	J	U	J/L U	ug/L	1	Chloroform	VOCs	9/4/08				
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs Chloromethane 1 ug/L		U		ug/L	1	Chloromethane	VOCs					
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs cis-1,2-Dichloroethene 1 ug/L		U		ug/L	1	cis-1,2-Dichloroethene	VOCs	9/4/08				
Surface Water RIVER Station 4 - PDA4 SW-SA2-GMCS-4 9/4/08 VOCs cis-1,3-Dichloropropene 1 ug/L	J	U	3/L U	ug/L	1	cis-1,3-Dichloropropene	VOCs					

			T	Cample					Lab	URS
			0 11 10	Sample	C	Chemical	Result	Unite	Qualifiers	Qualifiers
Media	Site	Location	Sample ID	Date	Group		Nesuit 5		U	Qualifiers
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Dichloromethane	<u>5</u>	ug/L ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Ethylbenzene	10	1	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Methyl N-Butyl Ketone	10	1	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Tetrachloroethene	2 2 2 2	ug/L		
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Toluene	0.87		J	-
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	trans-1,2-Dichloroethene	1	ug/L	Ü	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	VOCs	Xylenes, Total	2	ug/L	U	
0 5 11/-1		Ctation 4 DDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	(Carbethoxyethylidine)tripheny	10	ug/L	TJN	
Surface Water	RIVER	Station 4 - PDA4	500-5AZ-GIVICS-4	9/4/00		Iphosphora				
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	1,2,4-Trichlorobenzene	9.4		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	1,2-Dichlorobenzene	9.4		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	1,3-Dichlorobenzene	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	1,4-Dichlorobenzene	9.4	 	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	1H-Indole, 1-methyl-2-phenyl-	5.2	ug/L	TJN	
				214/22	0.400	2,2'-Oxybis(1-Chloropropane)	0.4		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	(bis-2-chloroisopropyl ether)	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2,4,5-Trichlorophenol	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2,4,6-Trichlorophenol	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2,4-Dichlorophenol	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2,4-Dimethylphenol	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2,4-Dinitrophenol	47	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2,4-Dinitrotoluene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2,6-Dinitrotoluene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2-Chloronaphthalene	9.4	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-4	9/4/08	SVOCs	2-Chlorophenol	9.4	l ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2-Isopropyl-6-	13	3 ug/L	TJN	
	<u> </u>					phenylnicotinonitrile	<u> </u>			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2-Methylnaphthalene	9.4		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2-Methylphenol (o-Cresol)	9.4		U	<u> </u>
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2-Nitroaniline	47		U	ļ
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2-Nitrophenol	9.4	l ug/L	U	<u> </u>

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	2-Pentanone, 4-hydroxy-4-methyl-	18	ug/L	TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	3 & 4 Methylphenol	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	3,6-Dioxa-2,4,5,7- tetrasilaoctane, 2,2,4	17	ug/L	TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	3-Nitroaniline	47	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	4,6-Dinitro-2-methylphenol	47	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	4-Bromophenyl Phenyl Ether	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	4-Chloro-3-methylphenol	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	4-Chlorophenyl Phenyl Ether	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	4-Nitrophenol	47	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Acenaphthene	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Acenaphthylene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Anthracene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Benzo(a)anthracene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Benzo(a)pyrene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Benzo(b)fluoranthene	9.4	ug/L	U	:
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Benzo(g,h,i)perylene	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Benzo(k)fluoranthene	9.4		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Benzyl Butyl Phthalate	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	bis(2-Chloroethoxy)methane	9.4		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	bis(2-Chloroethyl)ether	9.4	<u> </u>	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	bis(2-Ethylhexyl)phthalate	9.4	<u> </u>	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Butane, 2-methoxy-2-methyl-	66		TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Carbazole	9.4	-	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Chrysene	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Cyclopropane, 1,1-dichloro-2-ethenyl-	74		TJN	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Dibenzo(a,h)anthracene	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Dibenzofuran	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Diethyl Phthalate	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Dimethyl Phthalate	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Di-n-butylphthalate	9.4		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Di-n-octylphthalate	9.4	ug/L	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	1
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Dinoseb	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Fluoranthene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Fluorene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Hexachlorobenzene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Hexachlorobutadiene	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Hexachlorocyclopentadiene	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Hexachloroethane	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Indeno(1,2,3-cd)pyrene	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Isophorone	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Naphthalene	9.4	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		Nitrobenzene	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	N-Nitroso-di-n-propylamine	9.4	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	N-Nitrosodiphenylamine	9.4	ug/L	ב	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	P-Chloroaniline	19	ug/L	IJ	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Phenanthrene	9.4	ug/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Phenol	9.4	ug/L	IJ	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	P-Nitroaniline	47	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	SVOCs	Pyrene	9.4	ug/L	٦	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	4,4'-DDD	0.097	ug/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	4,4'-DDE	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	4,4'-DDT	0.097	ug/L	Ü	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	Aldrin	0.049	ug/L	٥	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	alpha-BHC	0.049	ug/L	٦	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	alpha-Chlordane	0.049	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		beta-BHC	0.049		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	delta-BHC	0.049		Ú	ĺ
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	Dieldrin	0.097	ug/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	Endosulfan I	0.049	<u> </u>	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	Endosulfan II	0.097	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	Endosulfan Sulfate	0.097	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		Endrin	0.097	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		Endrin Aldehyde	0.097		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		Endrin Ketone	0.097	ug/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		gamma-BHC (Lindane)	0.049		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	gamma-Chlordane	0.049		Ú	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		Heptachlor	0.049		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Pesticides	Heptachlor Epoxide	0.049	ug/L	J	

				Sample	Jei 2006		T		Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		Methoxychlor	0.49		U	Qualificio
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		Toxaphene	4.9		U	
		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Herbicides		0.48		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		2,4,5-TP (Silvex)	0.48		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Herbicides		0.48		Ü	
Surface Water	t			9/4/08	Herbicides		0.48		Ü	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4				9.6	<u> </u>	Ü	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Herbicides		0.48		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Herbicides		0.48		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Herbicides	Dichlorprop	0.40	ug/L	<u> </u>	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Herbicides	MCPA (2-Methyl-4-	120	ug/L	U	
				<u> </u>		Chlorophenoxyacetic Acid)	ļ			
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		MCPP	120	<u> </u>	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08		Pentachlorophenol	0.24		U	
Surface Water	<u> </u>	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Aluminum	2.5	······		
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Aluminum (Dissolved)	0.2		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Antimony	0.02		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Antimony (Dissolved)	0.02	 	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Arsenic	0.01		U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Arsenic (Dissolved)	0.0042	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Barium	0.12	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Barium (Dissolved)	0.076	mg/L		
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Beryllium	0.004	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Beryllium (Dissolved)	0.004	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Cadmium	0.005	mg/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Calcium	53	mg/L		
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Calcium (Dissolved)	50	mg/L	В	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Chromium	0.0036	mg/L	J	
Surface Water	RIVER	.1	SW-SA2-GMCS-4	9/4/08	Metals	Chromium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	1	SW-SA2-GMCS-4	9/4/08	Metals	Cobalt	0.0025	mg/L	J	
Surface Water	RIVER	1	SW-SA2-GMCS-4	9/4/08	Metals	Cobalt (Dissolved)	0.01		U	
Surface Water	RIVER	I	SW-SA2-GMCS-4	9/4/08	Metals	Copper	0.0056		J	
Surface Water	RIVER		SW-SA2-GMCS-4	9/4/08	Metals	Copper (Dissolved)	0.02		Ū	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Iron	2.9			
Surface Water	RIVER		SW-SA2-GMCS-4	9/4/08	Metals	Iron (Dissolved)	0.05		Ū	
Surface Water	RIVER	· · · · · · · · · · · · · · · · · · ·	SW-SA2-GMCS-4	9/4/08	Metals	Lead	0.0036		J	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Lead (Dissolved)		mg/L	l ū	

		:		Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Magnesium	24	mg/L		
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Manganese	0.18	mg/L		
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Manganese (Dissolved)	0.01	mg/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Mercury	0.0002	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Nickel	0.0046		J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Nickel (Dissolved)	0.002	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Potassium	4.1	mg/L		
Surface Water	1	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Potassium (Dissolved)	3.4	mg/L		
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Selenium	0.01	mg/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Selenium (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Silver	0.01	mg/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Sodium	25			
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Sodium (Dissolved)	24			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Thallium	0.025		U	
Surface Water		Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Vanadium	0.0096	mg/L	J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Vanadium (Dissolved)	0.0029		J	
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Zinc	0.029			
Surface Water	RIVER	Station 4 - PDA4	SW-SA2-GMCS-4	9/4/08	Metals	Zinc (Dissolved)	0.02	<u> </u>	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	2-Butanone (MEK)	0.89	ug/L	J	U
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs .	4-Methyl-2-pentanone (MIBK)	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Acetone	25	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Benzene	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	1	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Bromoform	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Bromomethane	27	ug/L		J

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85-4:-	0:4-	Lacation	Sample ID	Sample Date	Group	Chemical	Result	Units	Qualifiers	
Media	Site	Location Continue Con	SW-SA2-GMCS-5	9/5/08	VOCs	Carbon Disulfide	7	ug/L	U	Qualificis
Surface Water		Station 5 - PDA5		9/5/08	VOCs VOCs	Carbon Tetrachloride		ug/L ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs		1		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5			Chlorobenzene	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Chlorodibromomethane	1	ug/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Chloroethane	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Chloroform	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Chloromethane		ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Dichloromethane	5	ug/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Methyl N-Butyl Ketone	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Toluene	0.34	ug/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Vinyl chloride	1	ug/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	VOCs	Xylenes, Total	2	ug/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	1,2,4-Trichlorobenzene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	1,2-Dichlorobenzene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	1,3-Dichlorobenzene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	1,4-Dichlorobenzene	10		Ŭ	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2,2'-Oxybis(1-Chloropropane)	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2,4,5-Trichlorophenol	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2,4,6-Trichlorophenol	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2,4-Dichlorophenol	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	\$VOCs	2,4-Dimethylphenol	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2,4-Dinitrophenol	50	ug/L	U	
Surface Water			SW-SA2-GMCS-5	9/5/08	SVOCs	2,4-Dinitrotoluene	10	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-5	9/5/08	SVOCs	2,6-Dinitrotoluene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2-Chloronaphthalene	10	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-5	9/5/08	SVOCs	2-Chlorophenol	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2-Methylnaphthalene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2-Methylphenol (o-Cresol)	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2-Nitroaniline	50	ug/L	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	2-Nitrophenol	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	3 & 4 Methylphenol	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	3,3'-Dichlorobenzidine	20	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	3-Nitroaniline	50	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	4,6-Dinitro-2-methylphenol	50		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	4-Bromophenyl Phenyl Ether	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	4-Chloro-3-methylphenol	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	4-Chlorophenyl Phenyl Ether	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	4-Nitrophenol	50	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Acenaphthene	10	ug/L	Ú	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Acenaphthylene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Anthracene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Benzo(a)anthracene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Benzo(a)pyrene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Benzo(b)fluoranthene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Benzo(g,h,i)perylene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Benzo(k)fluoranthene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Benzyl Butyl Phthalate	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	bis(2-Chloroethoxy)methane	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	bis(2-Chloroethyl)ether	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	bis(2-Ethylhexyl)phthalate	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Carbazole	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Chrysene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Dibenzo(a,h)anthracene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Dibenzofuran	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Diethyl Phthalate	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Dimethyl Phthalate	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Di-n-butylphthalate	10	_	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Di-n-octylphthalate	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Dinoseb	10		U	
Surface Water			SW-SA2-GMCS-5	9/5/08	\$VOCs	Fluoranthene	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	\$VOCs	Fluorene	10	ug/L	U	
Surface Water	4	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Hexachlorobenzene	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Hexachlorobutadiene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Hexachlorocyclopentadiene	10	ug/L	U	

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	0::	1 47	Constants ID	Sample	C	Chaminal	Daguit	l laita	Lab Qualifiers	
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units		Qualifiers
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Hexachloroethane	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Indeno(1,2,3-cd)pyrene	10		U	
Surface Water	1	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Isophorone	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Naphthalene	10		U	
Surface Water	1	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Nitrobenzene	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08		N-Nitroso-di-n-propylamine	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	N-Nitrosodiphenylamine	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Nonacosanol	6.5		TJN	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	P-Chloroaniline	20		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Phenanthrene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Phenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Phosphine oxide, triphenyl-	97		TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	P-Nitroaniline	50		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	SVOCs	Pyrene	10	<u> </u>	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	4,4'-DDD	0.1		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	4,4'-DDE	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	4,4'-DDT	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Aldrin	0.05	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	alpha-BHC	0.05	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	alpha-Chlordane	0.05	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	beta-BHC	0.05	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	delta-BHC	0.05	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Dieldrin	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Endosulfan I	0.05	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Endosulfan II	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Endosulfan Sulfate	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Endrin	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Endrin Aldehyde	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Endrin Ketone	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	gamma-BHC (Lindane)	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	gamma-Chlordane	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	-	Heptachlor	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Pesticides	Heptachlor Epoxide	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08		Methoxychlor	0.5	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08		Toxaphene	5	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	· · _ · _ · _ · _ · _ · _ · · · · ·	0.5		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	2,4,5-TP (Silvex)	0.5	ug/L	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	2,4-D	0.5	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	2,4-DB	0.5	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	Dalapon	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	Dicamba	0.5	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	Dichlorprop	0.5	ug/L	٦	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	MCPA (2-Methyl-4- Chlorophenoxyacetic Acid)	120	ug/L	٥	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08		MCPP	120		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Herbicides	Pentachlorophenol	0.25	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Aluminum	2.8	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Aluminum (Dissolved)	0.2	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Antimony	0.02	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Antimony (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08		Arsenic	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Arsenic (Dissolved)	0.0084	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Barium	0.11	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Barium (Dissolved)	0.075	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Beryllium	0.004	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Beryllium (Dissolved)	0.004	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Cadmium	0.005	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Cadmium (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Calcium	51	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Calcium (Dissolved)	49	mg/L	В	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Chromium	0.0037	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Chromium (Dissolved)	0.01	mg/L	Ų	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Cobalt	0.0026	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Cobalt (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Copper	0.0038	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Copper (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Iron	3	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Iron (Dissolved)	0.05	mg/L	Ü	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Lead	0.005		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Lead (Dissolved)	0.005		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Magnesium	24	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Magnesium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Manganese	0.21	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Manganese (Dissolved)	0.01	mg/L	U	

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Mercury	0.0002	mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Nickel	0.0037	mg/L	J	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Nickel (Dissolved)	0.04	mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Potassium	4	mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Potassium (Dissolved)	3.4	mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Selenium	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Selenium (Dissolved)	0.01	mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Silver	0.01	mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Silver (Dissolved)	0.01	mg/L	Ŭ	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Sodium	23	mg/L		
Surface Water			SW-SA2-GMCS-5	9/5/08	Metals	Sodium (Dissolved)	23	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Thallium	0.0044	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Vanadium	0.011	mg/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Vanadium (Dissolved)	0.0033	mg/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Zinc	0.021	mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5	9/5/08	Metals	Zinc (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	2-Butanone (MEK)	0.93	<u> </u>	J	U
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	4-Methyl-2-pentanone (MIBK)	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Acetone	25	· · · · · · · · · · · · · · · · · · ·	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Benzene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Bromoform	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Bromomethane	15			J
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water	<u> </u>	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Carbon Tetrachloride	1 1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Chlorobenzene	1 1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Chlorodibromomethane	1 1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Chloroethane	1 1	ug/L	U	<u> </u>

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Chloroform	1	ug/L	U	
Surface Water	t.,	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Chloromethane	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water			SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	1	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Methyl N-Butyl Ketone	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Styrene (Monomer)	1	ug/L	Ų	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Toluene	0.49	ug/L	J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	1,2,4-Trichlorobenzene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	1,2-Dichlorobenzene	10	<u> </u>	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	1,3-Dichlorobenzene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	1,4-Dichlorobenzene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	1-Docosene	7.4	ug/L	TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	10	ug/L	Ų	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4,5-Trichlorophenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4,6-Trichlorophenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4-Dichlorophenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4-Dimethylphenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4-Dinitrophenol	50		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4-Dinitrotoluene	10	<u> </u>	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,6-Dinitrotoluene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Chloronaphthalene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Chlorophenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Methylnaphthalene	10	<u> </u>	U	
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Methylphenol (o-Cresol)	10		U	
Surface Water	RIVER	· 1 · · · · · · · · · · · · · · · · · ·	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Nitroaniline	50		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Nitrophenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	3 & 4 Methylphenol	10	ug/L	U	

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			0110	Sample	C	Chamiaal	Result	Units	Qualifiers	Qualifiers
Media	Site	Location	Sample ID	Date	Group	Chemical			U	Quanners
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	3,3'-Dichlorobenzidine	20	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	3H-Pyrazol-3-one, 2,4-dihydro- 5-methyl-4	4.6)	TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	3-Nitroaniline	50	_	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	3-Penten-2-one, 4-methyl-	16		TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	4,6-Dinitro-2-methylphenol	50		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	4-Bromophenyl Phenyl Ether	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	4-Chloro-3-methylphenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	4-Chlorophenyl Phenyl Ether	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	4-Nitrophenol	50		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Acenaphthene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Acenaphthylene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Anthracene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(a)anthracene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(a)pyrene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(b)fluoranthene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(g,h,i)perylene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(k)fluoranthene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzyl Butyl Phthalate	10	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	bis(2-Chloroethoxy)methane	10	ug/L	U	
Surface Water	RIVER	·	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	bis(2-Chloroethyl)ether	10	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	bis(2-Ethylhexyl)phthalate	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Butane, 2-methoxy-2-methyl-	110	ug/L	TJN	
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Carbazole	10	ug/L	U	
Surface Water			SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Chrysene	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Dibenzo(a,h)anthracene	10	ug/L	U	
Surface Water			SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Dibenzofuran	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Diethyl Phthalate	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Dimethyl Phthalate	10		U	
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Di-n-butylphthalate	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Di-n-octylphthalate	10	ug/L	U	
Surface Water		<u> </u>	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Dinoseb	10	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Fluoranthene	10		U	
Surface Water			SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Fluorene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Hexachlorobenzene	10	ug/L	U	
Surface Water			SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Hexachlorobutadiene	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Hexachlorocyclopentadiene	10	ug/L	U	

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Madia	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Media		Location		9/5/08	SVOCs	Hexachloroethane	10		U	Qualifiers
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs		24		TJN	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP			Hydrazine, 1,1-bis(1-	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Indeno(1,2,3-cd)pyrene	t		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Isophorone	10 10			
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08		Naphthalene		<u> </u>	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Nitrobenzene	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	N-Nitroso-di-n-propylamine	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	N-Nitrosodiphenylamine	10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08		P-Chloroaniline	20		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Phenanthrene	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Phenol	10		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Phosphine oxide, triphenyl-	150		TJN	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	P-Nitroaniline	50	-	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	SVOCs	Pyrene	10	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	4,4'-DDD	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	4,4'-DDE	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	4,4'-DDT	0.1	ug/L	Ü	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Aldrin	0.05	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	alpha-BHC	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	alpha-Chlordane	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	beta-BHC	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	delta-BHC	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Dieldrin	0.1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Endosulfan I	0.05	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08		Endosulfan II	0.1	ug/L	U	
Surface Water	·	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Endosulfan Sulfate	0.1	ug/L	Ų	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Endrin	0.1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Endrin Aldehyde	0.1	ug/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Endrin Ketone	0.1	ug/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	gamma-BHC (Lindane)	0.05	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	gamma-Chlordane	0.05		U	
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	ļ	Heptachlor	0.05	ug/L	U	
Surface Water	RIVER	I	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Heptachlor Epoxide	0.05	 	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08		Methoxychlor	0.5		U	
Surface Water	<u> </u>	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Pesticides	Toxaphene	5	1	Ú	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Herbicides		0.5		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08		2,4,5-TP (Silvex)	0.5		U	

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	011	1 47	Commis ID	Sample Date	Group	Chemical	Result	Unite		1
Media	Site	Location	Sample ID	9/5/08	Herbicides	I	0.5		U	Quanticis
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	Herbicides		0.5		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP		Herbicides		10		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08			0.5		U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08		Dicamba	0.5		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Herbicides	Dichlorprop	0.0	ug/L		
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Herbicides	MCPA (2-Methyl-4- Chlorophenoxyacetic Acid)	120		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08		MCPP	120		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Herbicides	Pentachlorophenol	0.25		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Aluminum	2.9			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Aluminum (Dissolved)	0.2		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Antimony	0.02		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Antimony (Dissolved)		mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Arsenic	0.0039		J	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Arsenic (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER		SW-SA2-GMCS-5-DUP	9/5/08	Metals	Barium		mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Barium (Dissolved)	0.073	mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Beryllium		mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Beryllium (Dissolved)		mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Cadmium		mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Cadmium (Dissolved)		mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Calcium		mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Calcium (Dissolved)		mg/L	В	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Chromium	0.0044	mg/L	J	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Chromium (Dissolved)	0.01	mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Cobalt	0.0023	mg/L	J	
Surface Water	1	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Cobalt (Dissolved)	0.01	<u> </u>	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Copper	0.0049	mg/L	J	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Copper (Dissolved)	0.0031		J	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Iron		mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Iron (Dissolved)	0.05	mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Lead	0.0027	mg/L	J	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Lead (Dissolved)		mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Magnesium	25	· · · · · · · ·		
Surface Water	1	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Magnesium (Dissolved)	22	mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Manganese		mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Manganese (Dissolved)	0.01	mg/L	U	

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Mercury	0.0002	mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Nickel	0.0053	mg/L	J	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Nickel (Dissolved)	0.0057	mg/L	J	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Potassium	4.1	mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Potassium (Dissolved)	3.3	mg/L		
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Selenium	0.01	mg/L	U	
Surface Water		Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Selenium (Dissolved)	0.0062	mg/L	JВ	U
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Silver	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Sodium	24			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Sodium (Dissolved)	23			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Thallium	0.025		U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Vanadium	0.011			
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Vanadium (Dissolved)	0.003		J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Zinc	0.02		J	
Surface Water	RIVER	Station 5 - PDA5	SW-SA2-GMCS-5-DUP	9/5/08	Metals	Zinc (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	1,1,1-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	1,1,2,2-Tetrachloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	1,1,2-Trichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	1,1-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	1,1-Dichloroethylene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	1,2-Dichloroethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	1,2-Dichloroethene (total)	2	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	1,2-Dichloropropane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	2-Butanone (MEK)	10		U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	4-Methyl-2-pentanone (MIBK)	10	×	U	ļ
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Acetone	25		U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Benzene	1	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Bromodichloromethane	1	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-9	9/5/08	VOCs	Bromoform	1	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Bromomethane	33			
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Carbon Disulfide	2	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Carbon Tetrachloride	1	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Chlorobenzene	1	ug/L	U	<u> </u>
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Chlorodibromomethane	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Chloroethane	1	ug/L	Ų	<u></u>

		<u> </u>		Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	
Surface Water	<u> </u>	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Chloroform	1	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Chloromethane	1	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	cis-1,2-Dichloroethene	1	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	cis-1,3-Dichloropropene	1	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Dichloromethane	5	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Ethylbenzene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Methyl N-Butyl Ketone	10	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Styrene (Monomer)	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Tetrachloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Toluene	0.53	ug/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	trans-1,2-Dichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	trans-1,3-Dichloropropene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Trichloroethene	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Vinyl chloride	1	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	VOCs	Xylenes, Total	2	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	1,2,4-Trichlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	1,2-Dichlorobenzene	9.7	ug/L	Ū	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	1,3-Dichlorobenzene	9.7	ug/L	Ų	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	1,4-Dichlorobenzene	9.7	ug/L	Ų	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2,4,5-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2,4,6-Trichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2,4-Dichlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2,4-Dimethylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2,4-Dinitrophenol	49	ug/L	U	<u> </u>
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2,4-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2,6-Dinitrotoluene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2-Chloronaphthalene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2-Chlorophenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2-Methylnaphthalene	9.7	ug/L	U	
Surface Water	RIVER		SW-SA2-GMCS-9	9/5/08	SVOCs	2-Methylphenol (o-Cresol)	9.7	ug/L	U	
Surface Water	•	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2-Nitroaniline	49		U	
Surface Water	<u> </u>	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	2-Nitrophenol	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	3 & 4 Methylphenol	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	3,3'-Dichlorobenzidine	19	ug/L	U	

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				Sample	_				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	3-Nitroaniline	49		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	4,6-Dinitro-2-methylphenol	49		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	4-Bromophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	4-Chloro-3-methylphenol	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	4-Chlorophenyl Phenyl Ether	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	4-Nitrophenol	49	ug/L	U	
Surface Water	<u> </u>	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Acenaphthene	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Acenaphthylene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Anthracene	9.7	ug/L	U	
Surface Water	1	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Benzo(a)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Benzo(a)pyrene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Benzo(b)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Benzo(g,h,i)perylene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Benzo(k)fluoranthene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Benzyl Butyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	bis(2-Chloroethoxy)methane	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	bis(2-Chloroethyl)ether	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	bis(2-Ethylhexyl)phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Carbazole	9.7	ug/L	Ų	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Chrysene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Dibenzo(a,h)anthracene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Dibenzofuran	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Diethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Dimethyl Phthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Di-n-butylphthalate	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Di-n-octylphthalate	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Dinoseb	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Fluoranthene	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Fluorene	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Hexachlorobenzene	9.7	ug/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Hexachlorobutadiene	9.7	ug/L	U	
Surface Water	1	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Hexachlorocyclopentadiene	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Hexachloroethane	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Indeno(1,2,3-cd)pyrene	9.7		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Isophorone	9.7	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Naphthalene	9.7	ug/L	U	
Surface Water	1	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	SVOCs	Nitrobenzene	9.7		U	

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		<u> </u>		Sample			1		Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	1	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		N-Nitroso-di-n-propylamine	9.7		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		N-Nitrosodiphenylamine	9.7		Ū	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		P-Chloroaniline	19		Ü	
	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Phenanthrene	9.7		Ü	
Surface Water Surface Water	<u> </u>	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Phenol	9.7		Ü	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Phosphine oxide, triphenyl-	23		TJN	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		P-Nitroaniline	49		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Pyrene	9.7	ug/L	Ū	
Surface Water	<u> </u>	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Pesticides		0.097	ug/L	Ū	
		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Pesticides		0.097		Ü	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Pesticides		0.097	ug/L	Ü	
Surface Water Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Aldrin	0.049		Ū	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		alpha-BHC	0.049		Ū	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		alpha-Chlordane	0.049		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		beta-BHC	0.049	<u> </u>	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		delta-BHC	0.049		Ü	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Dieldrin	0.097		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Endosulfan I	0.049		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Endosulfan II	0.097		Ü	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Endosulfan Sulfate	0.097		Ü	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Endrin	0.097	<u> </u>	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Endrin Aldehyde	0.097		U	
Surface Water	1	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Pesticides	Endrin Ketone	0.097	<u> </u>	Ū	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Pesticides	gamma-BHC (Lindane)	0.049	<u> </u>	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Pesticides	gamma-Chlordane	0.049		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Heptachlor	0.049		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Heptachlor Epoxide	0.049		U	
Surface Water	RIVER		SW-SA2-GMCS-9	9/5/08		Methoxychlor	0.49	X	υ	
Surface Water	RIVER		SW-SA2-GMCS-9	9/5/08	Pesticides		4.9		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Herbicides		0.48	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		2,4,5-TP (Silvex)	0.48		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Herbicides		0.48	\$ Trans	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Herbicides		0.48	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Herbicides		9.6	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Herbicides		0.48	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Herbicides	Dichlorprop	0.48	ug/L	U	

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Madia	Site	Location	Sample ID	Sample Date	Group	Chemical	Result	linite	Qualifiers	
Media	Site	Location	Sample ib	Date	Group	MCPA (2-Methyl-4-	Result			Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Herbicides	Chlorophenoxyacetic Acid)	120	ug/L	U	
Curfor Motor	הווערם	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Herbicides	MCPP	120	ug/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08		Pentachlorophenol	0.24		U	
Surface Water			SW-SA2-GMCS-9	9/5/08	Metals	Aluminum	3.3		0	J
Surface Water		Station 9 - PDA9		9/5/08	Metals	Aluminum (Dissolved)	0.2		U	3
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	<u> </u>	0.02		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9			Antimony Antimony (Dissolved)	0.02	mg/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals		0.0036		J	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Arsenic	0.0036		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Arsenic (Dissolved)		mg/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Barium	0.12			
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Barium (Dissolved)	0.077		1 :	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Beryllium		mg/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Beryllium (Dissolved)		mg/L	U	
Surface Water	<u> </u>	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Cadmium	0.005		U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Cadmium (Dissolved)		mg/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Calcium		mg/L		
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Calcium (Dissolved)		mg/L	В	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Chromium	0.0044		J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Chromium (Dissolved)	0.01	<u> </u>	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Cobalt	0.0021	<u> </u>	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Cobalt (Dissolved)	0.01		U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Copper	0.0047	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Copper (Dissolved)	0.02	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Iron	3.4	mg/L		J
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Iron (Dissolved)	0.05	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Lead	0.005	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Lead (Dissolved)	0.005	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Magnesium	26	mg/L		
Surface Water	RIVER		SW-SA2-GMCS-9	9/5/08	Metals	Magnesium (Dissolved)	23			
Surface Water	<u> </u>	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Manganese	0.24	mg/L		
Surface Water	RIVER		SW-SA2-GMCS-9	9/5/08	Metals	Manganese (Dissolved)	0.01	mg/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Mercury	0.0002	mg/L	U	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Nickel	0.0041	mg/L	J	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Nickel (Dissolved)	0.0026		J	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Potassium	4.4	mg/L		
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Potassium (Dissolved)	3.5	mg/L		

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Selenium	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Selenium (Dissolved)		mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Silver		mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Silver (Dissolved)	0.01	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Sodium	28	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Sodium (Dissolved)		mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Thallium	0.025	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Thallium (Dissolved)	0.025	mg/L	U	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Vanadium	0.011	mg/L		
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Vanadium (Dissolved)	0.0031	mg/L	J	
Surface Water		Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Zinc	0.019	mg/L	J	
Surface Water	RIVER	Station 9 - PDA9	SW-SA2-GMCS-9	9/5/08	Metals	Zinc (Dissolved)	0.02	mg/L	U	

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	1,1,1-Trichloroethane	7.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	1,1,2,2-Tetrachloroethane	7.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	1,1,2-Trichloroethane	7.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	1,1-Dichloroethane	7.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	1,1-Dichloroethylene	7.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	1,2-Dichloroethane	7.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	1,2-Dichloropropane	7.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	2-Butanone (MEK)	8.5	ug/Kg	J	U
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	4-Methyl-2-pentanone (MIBK)	40	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Acetone	36	ug/Kg	J	U
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	Benzene	3.3	ug/Kg	J	
Sediment			SED-SA2-GMCS-2	9/4/08	VOCs	Bromodichloromethane	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Bromoform	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Bromomethane	7.9	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Carbon Disulfide	7.9	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Carbon Tetrachloride	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Chlorobenzene	120	ug/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Chlorodibromomethane	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Chloroethane	7.9	ug/Kg	U	UJ
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Chloroform	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Chloromethane	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	cis-1,2-Dichloroethene	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	cis-1,3-Dichloropropene	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Dichloromethane	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Ethylbenzene	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Methyl N-Butyl Ketone	40	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Styrene (Monomer)	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Tetrachloroethene	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Toluene	1.9	ug/Kg	J	U
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	trans-1,2-Dichloroethene	7.9	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	trans-1,3-Dichloropropene	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Trichloroethene	7.9	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Vinyl chloride	7.9	-ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	VOCs	Xylenes, Total	16	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	1,1-Dichloro-2,2-bis(p- chlorophenyl)etha	490	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	1,2,4-Trichlorobenzene	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	1,2-Dichlorobenzene	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	1,3-Dichlorobenzene	500	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	SVOCs	1,4-Dichlorobenzene	130	ug/Kg	J	

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-	500	ug/Kg	U	
						chloroisopropyl ether)			<u> </u>	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2,4,5-Trichlorophenol	500	ug/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2,4,6-Trichlorophenol	500	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	SVOCs	2,4-Dichlorophenol	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2,4-Dimethylphenol	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2,4-Dinitrophenol	2600	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2,4-Dinitrotoluene	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2,6-Dinitrotoluene	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2-Chloronaphthalene	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2-Chlorophenol	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2-Methylnaphthalene	26	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2-Methylphenol (o-Cresol)	500	ug/Kg	U	·
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2-Nitroaniline	2600	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	2-Nitrophenol	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	3 & 4 Methylphenol	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	3,3'-Dichlorobenzidine	1000	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	3-Nitroaniline	2600	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	4,6-Dinitro-2-methylphenol	2600	ug/Kg	U	UJ
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	4-Bromophenyl Phenyl Ether	500	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08	SVOCs	4-Chloro-3-methylphenol	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	4-Chlorophenyl Phenyl Ether	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	4-Nitrophenol	2600	ug/Kg	l ŭ	UJ
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Acenaphthene	27	ug/Kg	J	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Acenaphthylene	500	ug/Kg	T U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Anthracene	52	ug/Kg	J	-
Sediment			SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(a)anthracene	95	ug/Kg	j	
			SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(a)pyrene	55	ug/Kg	J	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(b)fluoranthene	81	ug/Kg	J	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(g,h,i)perylene	45	ug/Kg	J	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Benzo(k)fluoranthene	500	ug/Kg	U	
Sediment				9/4/08	SVOCs	Benzyl Butyl Phthalate	500	ug/Kg ug/Kg	Ū	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2		SVOCs	bis(2-Chloroethoxy)methane	500	ug/Kg ug/Kg	T U	
Sediment			SED-SA2-GMCS-2	9/4/08	SVOCs		500	ug/Kg ug/Kg	1 0	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		bis(2-Chloroethyl)ether	500		 	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	bis(2-Ethylhexyl)phthalate	500	ug/Kg		l
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Carbazole		ug/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Chrysene	160	ug/Kg	J	
Sediment			SED-SA2-GMCS-2	9/4/08	SVOCs	Dibenzo(a,h)anthracene	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Dibenzofuran	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Diethyl Phthalate	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Dimethyl Phthalate	500	ug/Kg	U	l

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-2	9/4/08	SVOCs	Di-n-butylphthalate	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		Di-n-octylphthalate	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		Dinoseb	500	ug/Kg	Ų	UJ
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		Diphenyl sulfone	640	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Docosane	630	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Eicosane, 10-methyl-	610	ug/Kg	NLT	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Fluoranthene	150	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Fluorene	65	ug/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Heneicosane	270	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Heptadecane	510	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Hexachlorobenzene	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Hexachlorobutadiene	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Hexachlorocyclopentadiene	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		Hexachloroethane	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Hexatriacontane	300	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Indeno(1,2,3-cd)pyrene	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Isophorone	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		Naphthalene	500	ug/Kg	U	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Nitrobenzene	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		N-Nitroso-di-n-propylamine	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		N-Nitrosodiphenylamine	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Nonadecane	320	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	P-Chloroaniline	1000	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		Phenanthrene	250	ug/Kg	J	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Phenol	500	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	P-Nitroaniline	2600	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Pyrene	170	ug/Kg	J	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Squalane	290	ug/Kg	TJN	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Tetradecane	380	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Tridecane, 1-iodo-	310	ug/Kg	TJN	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	SVOCs	Tridecane, 6-propyl-	620	ug/Kg	TJN	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides	4,4'-DDD	1700	ug/Kg	D	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides	4,4'-DDE	30	ug/Kg	Р	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides		1300	ug/Kg	D	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides	Aldrin	13	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		alpha-BHC	13	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		alpha-Chlordane	13	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides		13	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides		13	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Pesticides		25	ug/Kg	U	
Sediment			SED-SA2-GMCS-2	9/4/08		Endosulfan I	13	ug/Kg	U	

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-2	9/4/08		Endosulfan II	25	ug/Kg	U	Quannors
Sediment			SED-SA2-GMCS-2	9/4/08		Endosulfan Sulfate	25	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-2	9/4/08	Pesticides		25	ug/Kg	u	
Sediment			SED-SA2-GMCS-2	9/4/08		Endrin Aldehyde	25	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-2	9/4/08		Endrin Ketone	25	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-2	9/4/08		gamma-BHC (Lindane)	13	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-2	9/4/08		gamma-Chlordane	13	ug/Kg	- ŭ	
Sediment			SED-SA2-GMCS-2	9/4/08	Pesticides		13	ug/Kg	Ŭ	
Sediment			SED-SA2-GMCS-2	9/4/08		Heptachlor Epoxide	13	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-2	9/4/08		Methoxychlor	130	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-2	9/4/08		Toxaphene	1300	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-2	9/4/08	Herbicides		13	ug/Kg	Ù	
Sediment			SED-SA2-GMCS-2	9/4/08		2,4,5-TP (Silvex)	13	ug/Kg	l ŭ	
Sediment			SED-SA2-GMCS-2	9/4/08	Herbicides		13	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-2	9/4/08	Herbicides		13	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-2	9/4/08	Herbicides		500	ug/Kg	Ü	
			SED-SA2-GMCS-2	9/4/08	Herbicides		13	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-2	9/4/08		Dichlorprop	13	ug/Kg ug/Kg	Ü	
Sediment	KIVEK	Station 2 - PDAZ	SED-SAZ-GIVICS-Z	914100	respicioes	MCPA (2-Methyl-4-				
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Herbicides	Chlorophenoxyacetic Acid)	3000	ug/Kg	U*	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Herbicides		3000	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Herbicides	Pentachlorophenol	13	ug/Kg	U	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Aluminum	14000	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08		Antimony	0.47	mg/Kg	J	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Arsenic	9.5	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Barium	520	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Beryllium	0.69	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Cadmium	0.62	mg/Kg	J	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Calcium	10000	mg/Kg	В	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Chromium	21	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Cobalt	7.4	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Copper	90	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Iron	18000	mg/Kg	В	
Sediment			SED-SA2-GMCS-2	9/4/08	Metals	Lead	16	mg/Kg	В	
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Magnesium	5400	mg/Kg	В	
Sediment			SED-SA2-GMCS-2	9/4/08	Metals	Manganese	550	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Mercury	0.035	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Nickel	20	mg/Kg		
Sediment			SED-SA2-GMCS-2	9/4/08	Metals	Potassium	2200	mg/Kg		
Sediment		Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Selenium	1.3	mg/Kg	J	
Sediment			SED-SA2-GMCS-2	9/4/08	Metals	Silver	1.5	mg/Kg	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Sodium	170	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Thallium	3.8	mg/Kg	C	
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Vanadium	40	mg/Kg		
Sediment	RIVER	Station 2 - PDA2	SED-SA2-GMCS-2	9/4/08	Metals	Zinc	180	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	1,1,1-Trichloroethane	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	VOCs	1,1,2,2-Tetrachloroethane	4.3	ug/Kg	Ų	
Sediment	RIVER		SED-SA2-GMCS-3	9/4/08	VOCs	1,1,2-Trichloroethane	4.3	ug/Kg	Ų	
Sediment			SED-SA2-GMCS-3	9/4/08	VOCs	1,1-Dichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	1,1-Dichloroethylene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	1,2-Dichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	1,2-Dichloropropane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	2-Butanone (MEK)	21	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	4-Methyl-2-pentanone (MIBK)	21	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Acetone	10	ug/Kg	J	U
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Benzene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Bromodichloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Bromoform	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Bromomethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Carbon Disulfide	4.3	ug/Kg	C	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Carbon Tetrachloride	4.3	ug/Kg	Ų	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Chlorobenzene	0.99	ug/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Chlorodibromomethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Chloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Chloroform	1.6	ug/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Chloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	cis-1,2-Dichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	cis-1,3-Dichloropropene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Dichloromethane	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	VOCs	Ethylbenzene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Methyl N-Butyl Ketone	21	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Styrene (Monomer)	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Tetrachloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Toluene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	trans-1,2-Dichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	trans-1,3-Dichloropropene	4.3	ug/Kg	Ú	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Trichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Vinyl chloride	4.3	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	VOCs	Xylenes, Total	8.6	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	1,2,4-Trichlorobenzene	360	ug/Kg	U	
Sediment	RIVER		SED-SA2-GMCS-3	9/4/08	SVOCs	1,2-Dichlorobenzene	360	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	1,3-Dichlorobenzene	360	ug/Kg	U	

				Sample	Septembe				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	L	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	1,4-Dichlorobenzene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-chloroisopropyl ether)	360	ug/Kg	U	
Sediment	DIVED	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	2,4,5-Trichlorophenol	360	ug/Kg	U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	2,4,6-Trichlorophenol	360	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	2,4-Dichlorophenol	360	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	2,4-Dimethylphenol	360	ug/Kg	Ü	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	2,4-Dinitrophenol	1900	ug/Kg	Ü	
}		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	2,4-Dinitrotoluene	360	ug/Kg	Ü	
Sediment Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	2,6-Dinitrotoluene	360	ug/Kg ug/Kg	Ü	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	2-Chloronaphthalene	360	ug/Kg ug/Kg	Ü	
			SED-SA2-GMCS-3	9/4/08	SVOCs	2-Chlorophenol	360	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	2-Methylnaphthalene	360	ug/Kg ug/Kg	Ü	
Sediment							360		U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs SVOCs	2-Methylphenol (o-Cresol)	1900	ug/Kg ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08		2-Nitroaniline	360		U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	2-Nitrophenol	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	3 & 4 Methylphenol		ug/Kg		
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	3,3'-Dichlorobenzidine	730	ug/Kg	Ų	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	3-Nitroaniline	1900	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	4,6-Dinitro-2-methylphenol	1900	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	4-Bromophenyl Phenyl Ether	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	4-Chloro-3-methylphenol	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	4-Chlorophenyl Phenyl Ether	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	4-Nitrophenol	1900	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Acenaphthene	360	ug/Kg	Ų	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Acenaphthylene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Anthracene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Benzo(a)anthracene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Benzo(a)pyrene	360	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Benzo(b)fluoranthene	360	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Benzo(g,h,i)perylene	360	ug/Kg	U	·
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Benzo(k)fluoranthene	360	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Benzyl Butyl Phthalate	360	ug/Kg	υ	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	bis(2-Chloroethoxy)methane	360	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	bis(2-Chloroethyl)ether	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	bis(2-Ethylhexyl)phthalate	140	ug/Kg	JВ	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Carbazole	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Chrysene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Dibenzo(a,h)anthracene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Dibenzofuran	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Diethyl Phthalate	360		U	

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1				Sample	_		_ ,		Lab	
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-3	9/4/08		Dimethyl Phthalate	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08		Di-n-butylphthalate	360	ug/Kg	Ü	,
Sediment			SED-SA2-GMCS-3	9/4/08		Di-n-octylphthalate	360	ug/Kg	U	,
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08		Dinoseb	360	ug/Kg	U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Fluoranthene	360	ug/Kg	U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08		Fluorene	360	ug/Kg	U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08		Hexachlorobenzene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08		Hexachlorobutadiene	360	ug/Kg	U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Hexachlorocyclopentadiene	360	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Hexachloroethane	360	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Hexanedioic acid, bis(2-ethylhexyl) este	180	ug/Kg	TJN	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	Indeno(1,2,3-cd)pyrene	360	.ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	SVOCs	Isophorone	360	ug/Kg	U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08		Naphthalene	360	ug/Kg	U	
Sediment	1	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08		Nitrobenzene	360	ug/Kg	U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08		N-Nitroso-di-n-propylamine	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08		N-Nitrosodiphenylamine	360	ug/Kg	Ū	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	SVOCs	P-Chloroaniline	730	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-3	9/4/08		Phenanthrene	360	ug/Kg	l ŭ	
Sediment			SED-SA2-GMCS-3	9/4/08		Phenoi	360	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-3	9/4/08		P-Nitroaniline	1900	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-3	9/4/08		Pyrene	360	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides		3.6	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides		3.6	ug/Kg	l ŭ	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides		3.6	ug/Kg	ŤŮ	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides		1.9	XX	Ŭ	
Sediment			SED-SA2-GMCS-3	9/4/08		alpha-BHC	1.9	ug/Kg	l ū	
Sediment			SED-SA2-GMCS-3	9/4/08		alpha-Chlordane	1.9	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides		1.9	ug/Kg	Ŭ	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides		1.9	ug/Kg	l ŭ	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides		3.6	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-3	9/4/08		Endosulfan I	1.9	ug/Kg ug/Kg	Ü	
			SED-SA2-GMCS-3	9/4/08		Endosulfan II	3.6		l ŭ	
Sediment			SED-SA2-GMCS-3	9/4/08		Endosulfan Sulfate	3.6	ug/Kg ug/Kg	 ŭ	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides		3.6	ug/Kg ug/Kg	l ü	
Sediment			SED-SA2-GMCS-3	9/4/08		Endrin Aldehyde	3.6		U	
Sediment				9/4/08		Endrin Ketone	3.6		U	
Sediment			SED-SA2-GMCS-3				1.9	ug/Kg ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08		gamma-BHC (Lindane)	1.9		U	-
Sediment			SED-SA2-GMCS-3	9/4/08		gamma-Chlordane	1.9	ug/Kg	U	
Sediment	KIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Pesticides	Heptachlor	1.9	ug/Kg		L

				Sample	September				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08		Heptachlor Epoxide	1.9	ug/Kg	U	
Sediment		Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08		Methoxychlor	19	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	Pesticides	Toxaphene	190	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	Herbicides	2,4,5-T	9.2	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Herbicides	2,4,5-TP (Silvex)	9.2	ug/Kg	U	
	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Herbicides	2,4-D	9.2	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	Herbicides	2,4-DB	9.2	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Herbicides	Dalapon	370	ug/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	Herbicides	Dicamba	9.2	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Herbicides	Dichlorprop	9.2	ug/Kg	U	
Cadinaaa	D11/CD	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Herbicides	MCPA (2-Methyl-4-	2200	ug/Kg	U*	
Sediment	RIVER	Station 3 - PDA3	SED-SAZ-GIVICS-3	9/4/00		Chlorophenoxyacetic Acid)				
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Herbicides		2200	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Herbicides	Pentachlorophenol	9.2	ug/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Aluminum	880	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Antimony	2.1	mg/Kg	U	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Arsenic	2.6	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Barium	16	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Beryllium	0.066	mg/Kg	j	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Cadmium	0.17	mg/Kg	J	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Calcium	840	mg/Kg	В	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Chromium	1.8	mg/Kg		
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Cobalt	2.7	mg/Kg		
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Copper	3.9	mg/Kg		
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Iron	3300	mg/Kg	В	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Lead	3	mg/Kg	В	
Sediment	RIVER	Station 3 - PDA3	SED-SA2-GMCS-3	9/4/08	Metals	Magnesium	500	mg/Kg	В	
Sediment	RIVER		SED-SA2-GMCS-3	9/4/08	Metals	Manganese	71	mg/Kg		
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Mercury	0.022	mg/Kg	U	
Sediment	RIVER		SED-SA2-GMCS-3	9/4/08	Metals	Nickel	5.8	mg/Kg		
Sediment	RIVER		SED-SA2-GMCS-3	9/4/08	Metals	Potassium	160	mg/Kg		
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Selenium	0.28	mg/Kg	J	
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Silver	1	mg/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Sodium	100	mg/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Thallium	2.6	mg/Kg	U	
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Vanadium	3.5	mg/Kg		
Sediment			SED-SA2-GMCS-3	9/4/08	Metals	Zinc	52	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08	VOCs	1,1,1-Trichloroethane	4.1	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08		1,1,2,2-Tetrachloroethane	4.1	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	VOCs	1,1,2-Trichloroethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	1,1-Dichloroethane	4.1	ug/Kg	U	

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				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-4	9/4/08	VOCs	1,1-Dichloroethylene	4.1	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	VOCs	1,2-Dichloroethane	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	1,2-Dichloropropane	4.1	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	2-Butanone (MEK)	20	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	4-Methyl-2-pentanone (MIBK)	20	ug/Kg	Ų	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Acetone	7.6	ug/Kg	J	U
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Benzene	4.1	ug/Kg	Ų	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Bromodichloromethane	4.1	ug/Kg	Ų	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Bromoform	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Bromomethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Carbon Disulfide	4.1	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Carbon Tetrachloride	4.1	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Chlorobenzene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Chlorodibromomethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Chloroethane	4.1	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Chloroform	0.84	ug/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Chloromethane	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	cis-1,2-Dichloroethene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	cis-1,3-Dichloropropene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Dichloromethane	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Ethylbenzene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Methyl N-Butyl Ketone	20	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Styrene (Monomer)	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Tetrachloroethene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Toluene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	trans-1,2-Dichloroethene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	trans-1,3-Dichloropropene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Trichloroethene	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Vinyl chloride	4.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	VOCs	Xylenes, Total	8.1	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	1,2,4-Trichlorobenzene	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	1,2-Dichlorobenzene	360		U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	1,3-Dichlorobenzene	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	1,4-Dichlorobenzene	360		U	
						2,2'-Oxybis(1-Chloropropane) (bis-2-				
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	chloroisopropyl ether)	200	3	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	2,4,5-Trichlorophenol	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	2,4,6-Trichlorophenol	360		U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	2,4-Dichlorophenol	360		U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	2,4-Dimethylphenol	360	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	2,4-Dinitrophenol	1800	ug/Kg	U	

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	2,4-Dinitrotoluene	360	ug/Kg	U	Qualifiers
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	2,6-Dinitrotoluene	360	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	2-Chloronaphthalene	360	ug/Kg	Ū	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	2-Chlorophenol	360	ug/Kg	Ü	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	2-Methylnaphthalene	360	ug/Kg	Ü	
			SED-SA2-GMCS-4	9/4/08	SVOCs	2-Methylphenol (o-Cresol)	360	ug/Kg	Ü	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	2-Nitroaniline	1800	ug/Kg ug/Kg	Ü	
Sediment Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	2-Nitrophenol	360	ug/Kg ug/Kg	Ü	
		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	3 & 4 Methylphenol	360	ug/Kg ug/Kg	Ü	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	3,3'-Dichlorobenzidine	720	ug/Kg ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	3-Nitroaniline	1800	ug/Kg ug/Kg	Ü	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	4,6-Dinitro-2-methylphenol	1800	ug/Kg ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	4-Bromophenyl Phenyl Ether	360	ug/Kg ug/Kg	U	
Sediment		Station 4 - PDA4		9/4/08	SVOCs	1 1	360	ug/Kg ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4			4-Chloro-3-methylphenol	360		U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	4-Chlorophenyl Phenyl Ether	1800	ug/Kg	Ü	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	4-Nitrophenol		ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Acenaphthene	360	ug/Kg		
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Acenaphthylene	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Anthracene	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Benzo(a)anthracene	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Benzo(a)pyrene	360	ug/Kg	U	ļ
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Benzo(b)fluoranthene	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Benzo(g,h,i)perylene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Benzo(k)fluoranthene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Benzyl Butyl Phthalate	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	bis(2-Chloroethoxy)methane	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	bis(2-Chloroethyl)ether	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	bis(2-Ethylhexyl)phthalate	130	ug/Kg	JB	U
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Carbazole	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Chrysene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Dibenzo(a,h)anthracene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Dibenzofuran	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Diethyl Phthalate	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Dimethyl Phthalate	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Di-n-butylphthalate	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Di-n-octylphthalate	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Dinoseb	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Fluoranthene	360	ug/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Fluorene	360	ug/Kg	Ų	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Hexachlorobenzene	360	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Hexachlorobutadiene	360	ug/Kg	U	<u>i</u>

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Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-4	9/4/08		Hexachlorocyclopentadiene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08		Hexachloroethane	360	ug/Kg	U	
Sediment	i		SED-SA2-GMCS-4	9/4/08	SVOCs	Hexanedioic acid, bis(2-ethylhexyl) este	150	ug/Kg	TJN	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Indeno(1,2,3-cd)pyrene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Isophorone	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Naphthalene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Nitrobenzene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	N-Nitroso-di-n-propylamine	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	N-Nitrosodiphenylamine	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	P-Chloroaniline	720	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	SVOCs	Phenanthrene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Phenol	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	P-Nitroaniline	1800	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	SVOCs	Pyrene	360	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Pesticides		3.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Pesticides	4,4'-DDE	3.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Pesticides	4,4'-DDT	3.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Pesticides	Aldrin	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	alpha-BHC	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	alpha-Chlordane	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	beta-BHC	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	delta-BHC	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	Dieldrin	3.6	ug/Kg	υ	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	Endosulfan I	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	Endosulfan II	3.6	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	Endosulfan Sulfate	3.6	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	Endrin	3.6	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Pesticides	Endrin Aldehyde	3.6	ug/Kg	U	
Sediment	RIVER		SED-SA2-GMCS-4	9/4/08		Endrin Ketone	3.6	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08		gamma-BHC (Lindane)	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08		gamma-Chlordane	1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08		Heptachlor	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08		Heptachlor Epoxide	1.8	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08		Methoxychlor	18	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08		Toxaphene	180	ug/Kg	U	
Sediment	RIVER		SED-SA2-GMCS-4		Herbicides		9	ug/Kg	U	
Sediment			SED-SA2-GMCS-4			2,4,5-TP (Silvex)	9	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Herbicides		9	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Herbicides		9	ug/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Herbicides	Dalapon	360	ug/Kg	U	

				Sample	-				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-4	9/4/08	Herbicides		9	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08		Dichlorprop	9	ug/Kg	U	
Sediment	1		SED-SA2-GMCS-4	9/4/08		MCPA (2-Methyl-4-	2200	ug/Kg	U *	
Sediment						Chlorophenoxyacetic Acid)				
Sediment			SED-SA2-GMCS-4	9/4/08	Herbicides		2200	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08		Pentachlorophenol	9	ug/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Aluminum	1200	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08		Antimony	1.9	mg/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08		Arsenic	1.8	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08		Barium	15	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08		Beryllium	0.074	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Cadmium	0.48	mg/Kg	U	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Calcium	760	mg/Kg	В	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Chromium	2.9	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Cobalt	2.6	mg/Kg		
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Copper	1.8	mg/Kg	J	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Iron	3700	mg/Kg	В	
Sediment	RIVER	Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Lead	2.3	mg/Kg	В	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Magnesium	630	mg/Kg	В	
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Manganese	63	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Mercury	0.019	mg/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Nickel	5.8	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Potassium	150	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Selenium	2.4	mg/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Silver	0.95	mg/Kg	U	
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Sodium	90	mg/Kg	j	
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Thallium	2.4	mg/Kg	U	
Sediment		Station 4 - PDA4	SED-SA2-GMCS-4	9/4/08	Metals	Vanadium	4.5	mg/Kg		
Sediment			SED-SA2-GMCS-4	9/4/08	Metals	Zinc	9.8	mg/Kg		
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	1,1,1-Trichloroethane	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	1,1,2,2-Tetrachloroethane	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	1,1,2-Trichloroethane	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	1,1-Dichloroethane	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	1,1-Dichloroethylene	4.6	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	1,2-Dichloroethane	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	1,2-Dichloropropane	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	2-Butanone (MEK)	23	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	4-Methyl-2-pentanone (MIBK)	23	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Acetone	14	ug/Kg	J	U
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Benzene	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Bromodichloromethane	4.6	ug/Kg	U	

				Sample	•				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Bromoform	4.6	ug/Kg	U*	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Bromomethane	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Carbon Disulfide	1.8	ug/Kg	J	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Carbon Tetrachloride	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Chlorobenzene	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Chlorodibromomethane	4.6	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Chloroethane	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Chloroform	0.79	ug/Kg	J	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Chloromethane	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	cis-1,2-Dichloroethene	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	cis-1,3-Dichloropropene	4.6	ug/Kg	U	·
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Dichloromethane	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Ethylbenzene	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Methyl N-Butyl Ketone	23	ug/Kg	U	·
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Styrene (Monomer)	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Tetrachloroethene	4.6	ug/Kg	U*	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Toluene	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	trans-1,2-Dichloroethene	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	trans-1,3-Dichloropropene	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Trichloroethene	4.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	VOCs	Vinyl chloride	4.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	VOCs	Xylenes, Total	9.2	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	1,2,4-Trichlorobenzene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	1,2-Dichlorobenzene	340	ug/Kg	· U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	1,3-Dichlorobenzene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	1,4-Dichlorobenzene	340	ug/Kg	U	
Cadinana	DIVED	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	2,2'-Oxybis(1-Chloropropane) (bis-2-	340	ug/Kg	U	
Sediment	KIVER					chloroisopropyl ether)				
Sediment	RIVER		SED-SA2-GMCS-5	9/5/08	SVOCs	2,4,5-Trichlorophenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2,4,6-Trichlorophenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2,4-Dichlorophenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2,4-Dimethylphenol	340	ug/Kg	U	
Sediment	RIVER		SED-SA2-GMCS-5	9/5/08	SVOCs	2,4-Dinitrophenol	1800	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2,4-Dinitrotoluene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2,6-Dinitrotoluene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2-Chloronaphthalene	340	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	2-Chlorophenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2-Methylnaphthalene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2-Methylphenol (o-Cresol)	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	2-Nitroaniline	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	2-Nitrophenol	340	ug/Kg	U	

					Septembe	, 2000				
				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	3 & 4 Methylphenol	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	3,3'-Dichlorobenzidine	690	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	3-Nitroaniline	1800	ug/Kg	U	í
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	4,6-Dinitro-2-methylphenol	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	4-Bromophenyl Phenyl Ether	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	4-Chloro-3-methylphenol	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	4-Chlorophenyl Phenyl Ether	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	4-Nitrophenol	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	Acenaphthene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	Acenaphthylene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	Anthracene	340	ug/Kg	Ų	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	Benzo(a)anthracene	340	ug/Kg	Ü	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	Benzo(a)pyrene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Benzo(b)fluoranthene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Benzo(g,h,i)perylene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Benzo(k)fluoranthene	340	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	Benzyl Butyl Phthalate	340	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	bis(2-Chloroethoxy)methane	340	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	bis(2-Chloroethyl)ether	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	bis(2-Ethylhexyl)phthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Carbazole	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Chrysene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Dibenzo(a,h)anthracene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Dibenzofuran	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Diethyl Phthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Dimethyl Phthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Di-n-butylphthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Di-n-octylphthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Dinoseb	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Fluoranthene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Fluorene	340	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	SVOCs	Hexachlorobenzene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Hexachlorobutadiene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Hexachlorocyclopentadiene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Hexachloroethane	340	ug/Kg	U	f
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Indeno(1,2,3-cd)pyrene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Isophorone	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Naphthalene	340	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	Nitrobenzene	340	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5	9/5/08	SVOCs	N-Nitroso-di-n-propylamine	340	ug/Kg	Ū	
Sediment	•		SED-SA2-GMCS-5	9/5/08	SVOCs	N-Nitrosodiphenylamine	340	ug/Kg	Ū	

]			Sample	September				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-5	9/5/08		P-Chloroaniline	690	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08		Phenanthrene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08		Phenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08		P-Nitroaniline	1800	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08		Pyrene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides		3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides		3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides		3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides		1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	alpha-BHC	1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	alpha-Chlordane	1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	beta-BHC	1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	delta-BHC	1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	Dieldrin	3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	Endosulfan I	1.8	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Pesticides	Endosulfan II	3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	Endosulfan Sulfate	3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	Endrin	3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	Endrin Aldehyde	3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	Endrin Ketone	3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	gamma-BHC (Lindane)	1.8	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Pesticides	gamma-Chlordane	1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Pesticides	Heptachlor	1.8	ug/Kg	υ	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Pesticides	Heptachlor Epoxide	1.8	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08		Methoxychlor	18	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Pesticides	Toxaphene	180	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Herbicides	2,4,5-T	8.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08		2,4,5-TP (Silvex)	8.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Herbicides	2,4-D	8.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Herbicides		8.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Herbicides	Dalapon	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Herbicides		8.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Herbicides	Dichlorprop	8.6	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Herbicides	MCPA (2-Methyl-4- Chlorophenoxyacetic Acid)	2100	ug/Kg	U*	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Herbicides		2100	ug/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08		Pentachlorophenol	8.6	ug/Kg	U	
Sediment		I	SED-SA2-GMCS-5	9/5/08		Aluminum	680	mg/Kg		
Sediment			SED-SA2-GMCS-5	9/5/08		Antimony	1.8	mg/Kg	U	
Sediment			SED-SA2-GMCS-5	9/5/08	Metals	Arsenic	2	mg/Kg		
Sediment			SED-SA2-GMCS-5	9/5/08	Metals	Barium	18	mg/Kg		

Sauget Area 2

Groundwater Migration Control System Sediment Sample Results

			1	Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Beryllium	0.07	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Cadmium	0.46	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Calcium	590	mg/Kg	В	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Chromium	1.9	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Cobalt	1.9	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Copper	1.7	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Iron	3200	mg/Kg	В	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Lead	4	mg/Kg	В	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Magnesium	360	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Manganese	95	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Mercury	0.02	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Nickel	3.4	mg/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Potassium	140	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Selenium	2.3	mg/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Silver	0.92	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Sodium	92	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Thallium	2.3	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Vanadium	3.3	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5	9/5/08	Metals	Zinc	8.8	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1,1-Trichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1,2,2-Tetrachloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1,2-Trichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1-Dichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	1,1-Dichloroethylene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	1,2-Dichloroethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	1,2-Dichloropropane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	2-Butanone (MEK)	6.8	ug/Kg	J	U
Sediment	RIVER		SED-SA2-GMCS-5-DUP	9/5/08	VOCs	4-Methyl-2-pentanone (MIBK)	22	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Acetone	18	ug/Kg	J	U
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Benzene	4.2	ug/Kg	J	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Bromodichloromethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Bromoform	4.3	ug/Kg	U *	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Bromomethane	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Carbon Disulfide	4.3	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Carbon Tetrachloride	4.3	ug/Kg	Ų	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Chlorobenzene	4.3	ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Chlorodibromomethane	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Chloroethane	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Chloroform	0.71	ug/Kg	J	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Chloromethane	4.3	ug/Kg	Ų	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	cis-1,2-Dichloroethene	4.3	ug/Kg	U	

Sauget Area 2

Groundwater Migration Control System Sediment Sample Results

				Sample	•				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	cis-1,3-Dichloropropene	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Dichloromethane	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Ethylbenzene	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Methyl N-Butyl Ketone	22	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Styrene (Monomer)	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Tetrachloroethene	4.3	ug/Kg	U*	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Toluene	2.3	ug/Kg	J	U
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	trans-1,2-Dichloroethene	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	trans-1,3-Dichloropropene	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Trichloroethene	4.3	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Vinyl chloride	4.3	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	VOCs	Xylenes, Total	8.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	1,2,4-Trichlorobenzene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	1,2-Dichlorobenzene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	1,3-Dichlorobenzene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	1,4-Dichlorobenzene	340	ug/Kg	U	
	1		0ED 040 0400 F DUD	0/5/00	0)/00-	2,2'-Oxybis(1-Chloropropane) (bis-2-	340	ug/Kg	U	
Sediment	KIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	chloroisopropyl ether)	340		ł	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4,5-Trichlorophenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4,6-Trichlorophenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4-Dichlorophenol	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4-Dimethylphenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4-Dinitrophenol	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,4-Dinitrotoluene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2,6-Dinitrotoluene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Chloronaphthalene	340	ug/Kg	Ų	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Chlorophenol	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Methylnaphthalene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Methylphenol (o-Cresol)	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Nitroaniline	1800	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	2-Nitrophenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	3 & 4 Methylphenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	3,3'-Dichlorobenzidine	680	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	3-Nitroaniline	1800	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	4,6-Dinitro-2-methylphenol	1800	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	4-Bromophenyl Phenyl Ether	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	4-Chloro-3-methylphenol	340	ug/Kg	υ	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	4-Chlorophenyl Phenyl Ether	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	4-Nitrophenol	1800	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Acenaphthene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Acenaphthylene	340	ug/Kg	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Anthracene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(a)anthracene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(a)pyrene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08		Benzo(b)fluoranthene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(g,h,i)perylene	340	ug/Kg	U	
Sediment	RIVER		SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzo(k)fluoranthene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Benzyl Butyl Phthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		bis(2-Chloroethoxy)methane	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	bis(2-Chloroethyl)ether	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	bis(2-Ethylhexyl)phthalate	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Carbazole	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Chrysene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Dibenzo(a,h)anthracene	340	ug/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Dibenzofuran	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Diethyl Phthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Dimethyl Phthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Di-n-butylphthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Di-n-octylphthalate	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Dinoseb	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Fluoranthene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Fluorene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Hexachlorobenzene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Hexachlorobutadiene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Hexachlorocyclopentadiene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Hexachloroethane	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Indeno(1,2,3-cd)pyrene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Isophorone	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Naphthalene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Nitrobenzene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		N-Nitroso-di-n-propylamine	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		N-Nitrosodiphenylamine	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		P-Chloroaniline	680	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Phenanthrene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	Phenol	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	SVOCs	P-Nitroaniline	1800	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Pyrene	340	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		1.8	ug/Kg	U	

	1		I	Sample	September		1		Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		alpha-Chlordane	1.8	ug/Kg	Qualificis	Qualifiers
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		1.8	ug/Kg ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		3.4	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Endosulfan I	1.8	ug/Kg ug/Kg	U	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08		Endosulfan II	3.4	ug/Kg	Ü	
Sediment		Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08		Endosulfan Sulfate	3.4	ug/Kg ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		3.4	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Endrin Aldehyde	3.4	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Endrin Ketone	3.4	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		gamma-BHC (Lindane)	1.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		gamma-Chlordane	1.8	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Pesticides		1.8	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Heptachlor Epoxide	1.8	ug/Kg ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Methoxychlor	1.0	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Toxaphene	180	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Herbicides		8.6	ug/Kg ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		2,4,5-TP (Silvex)	8.6	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Herbicides		8.6	ug/Kg ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Herbicides		8.6	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Herbicides		340	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Herbicides		8.6	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Dichlorprop	8.6	ug/Kg	Ü	
<u> </u>	1					MCPA (2-Methyl-4-				
Sediment	1	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Herbiciaes	Chlorophenoxyacetic Acid)	2100	ug/Kg	U*	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		MCPP	2100	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Pentachlorophenol	8.6	ug/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Aluminum	780	mg/Kg		
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Antimony	1.8	mg/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Arsenic	1.4	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Metals	Barium	13	mg/Kg		
Sediment			SED-SA2-GMCS-5-DUP	9/5/08		Beryllium	0.092	mg/Kg	J	
Sediment	RIVER		SED-SA2-GMCS-5-DUP	9/5/08	Metals	Cadmium	0.45	mg/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Calcium	750	mg/Kg	В	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Chromium	2.8	mg/Kg		
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Cobalt	2.1	mg/Kg		
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Copper	4.2	mg/Kg		
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Iron	3700	mg/Kg	В	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Lead	4.5	mg/Kg	В	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Magnesium	580	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Metals	Manganese	85	mg/Kg		

			<u> </u>	Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER		SED-SA2-GMCS-5-DUP	9/5/08	Metals	Mercury	0.02	mg/Kg	U	
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Nickel	4.8	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Metals	Potassium	97	mg/Kg		
Sediment			SED-SA2-GMCS-5-DUP	9/5/08	Metals	Selenium	2.3	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Metals	Silver	0.91	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Metals	Sodium	91	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Metals	Thallium	2.3	mg/Kg	U	
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Metals	Vanadium	2.7	mg/Kg		
Sediment	RIVER	Station 5 - PDA5	SED-SA2-GMCS-5-DUP	9/5/08	Metals	Zinc	10	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	1,1,1-Trichloroethane	5.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	1,1,2,2-Tetrachloroethane	5.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	1,1,2-Trichloroethane	5.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	1,1-Dichloroethane	5.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	1,1-Dichloroethylene	5.9	ug/Kg	C	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	1,2-Dichloroethane	5.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	1,2-Dichloropropane	5.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	2-Butanone (MEK)	29	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	4-Methyl-2-pentanone (MIBK)	29	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	Acetone	13	ug/Kg	J	U
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	Benzene	5.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	Bromodichloromethane	5.9	ug/Kg	U	
Sediment	RIVER		SED-SA2-GMCS-9	9/5/08	VOCs	Bromoform	5.9	ug/Kg	U*	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	Bromomethane	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Carbon Disulfide	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Carbon Tetrachloride	5.9	ug/Kg	U	
Sediment	RIVER		SED-SA2-GMCS-9	9/5/08	VOCs	Chlorobenzene	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Chlorodibromomethane	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Chloroethane	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Chloroform	0.98	ug/Kg	J	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Chloromethane	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	cis-1,2-Dichloroethene	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	cis-1,3-Dichloropropene	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Dichloromethane	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Ethylbenzene	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Methyl N-Butyl Ketone	29	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Styrene (Monomer)	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Tetrachloroethene	5.9	ug/Kg	U*	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Toluene	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	trans-1,2-Dichloroethene	5.9	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	trans-1,3-Dichloropropene	5.9	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	VOCs	Trichloroethene	5.9	ug/Kg	U	

				Sample		<u> </u>		·. · · · · · · · · · · · · · · · · · ·	Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Vinyl chloride	5.9	ug/Kg	U	<u> </u>
Sediment			SED-SA2-GMCS-9	9/5/08	VOCs	Xylenes, Total	12	ug/Kg	1	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	1,2,4-Trichlorobenzene	380	ug/Kg	Ū	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	1,2-Dichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	1,3-Dichlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	1,4-Dichlorobenzene	380	ug/Kg	U	
	חועכה	C4-4: 0 DDA0	OED CAO CMCC O	0/5/00		2,2'-Oxybis(1-Chloropropane) (bis-2-	380			
Sediment	KIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	chloroisopropyl ether)	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	2,4,5-Trichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	2,4,6-Trichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	2,4-Dichlorophenol	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	2,4-Dimethylphenol	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	2,4-Dinitrophenol	2000	ug/Kg	U	·
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	2,4-Dinitrotoluene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	2,6-Dinitrotoluene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	2-Chloronaphthalene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	2-Chlorophenol	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	2-Methylnaphthalene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	2-Methylphenol (o-Cresol)	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	2-Nitroaniline	2000	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	2-Nitrophenol	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	3 & 4 Methylphenol	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	3,3'-Dichlorobenzidine	760	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	3-Nitroaniline	2000	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	4,6-Dinitro-2-methylphenol	2000	ug/Kg	U	UJ
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	4-Bromophenyl Phenyl Ether	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	4-Chloro-3-methylphenol	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	4-Chlorophenyl Phenyl Ether	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	4-Nitrophenol	2000	ug/Kg	U	UJ
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Acenaphthene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Acenaphthylene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Anthracene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Benzo(a)anthracene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Benzo(a)pyrene	380	ug/Kg	Ų	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Benzo(b)fluoranthene	380	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Benzo(g,h,i)perylene	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Benzo(k)fluoranthene	380	ug/Kg	Ü	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	Benzyl Butyl Phthalate	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	bis(2-Chloroethoxy)methane	380	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	SVOCs	bis(2-Chloroethyl)ether	380	ug/Kg	U	ļ
Sediment	IKIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	bis(2-Ethylhexyl)phthalate	380	ug/Kg	U	

				Sample					Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Carbazole	380	ug/Kg	Ú	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Chrysene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Dibenzo(a,h)anthracene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Dibenzofuran	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Diethyl Phthalate	380	ug/Kg	Ų	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Dimethyl Phthalate	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Di-n-butylphthalate	380	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Di-n-octylphthalate	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Dinoseb	380	ug/Kg	U	UJ
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Fluoranthene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Fluorene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Hexachlorobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Hexachlorobutadiene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Hexachlorocyclopentadiene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Hexachloroethane	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Indeno(1,2,3-cd)pyrene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Isophorone	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Naphthalene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	Nitrobenzene	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	N-Nitroso-di-n-propylamine	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		N-Nitrosodiphenylamine	380	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		P-Chloroaniline	760	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Phenanthrene	380	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Phenol	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	SVOCs	P-Nitroaniline	2000	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Pyrene	380	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides	4,4'-DDD	3.8	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides		3.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	Pesticides		3.8	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	Pesticides		2	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08		alpha-BHC	2	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		alpha-Chlordane	2	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides	1	2	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides	1	2	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides		3.8	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Endosulfan I	2	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Endosulfan II	3.8	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Endosulfan Sulfate	3.8	ug/Kg	Ų	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides		3.8	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		Endrin Aldehyde	3.8	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides	Endrin Ketone	3.8	ug/Kg	U	

				Sample	-				Lab	URS
Media	Site	Location	Sample ID	Date	Group	Chemical	Result	Units	Qualifiers	Qualifiers
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		gamma-BHC (Lindane)	2	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides	gamma-Chlordane	2	ug/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08		Heptachlor	2	ug/Kg	Ų	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides	Heptachlor Epoxide	2	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides	Methoxychlor	20	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Pesticides	Toxaphene	200	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	2,4,5-T	9.6	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	2,4,5-TP (Silvex)	9.6	ug/Kg	U	
Sediment		Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides		9.6	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	2,4-DB	9.6	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	Dalapon	380	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	Dicamba	9.6	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	Dichlorprop	3.4	ug/Kg	J	
Sediment	DIVED	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08		MCPA (2-Methyl-4-	2300	ug/Kg	U*	
Sediment	KIVEK	Station 9 - PDA9				Chlorophenoxyacetic Acid)				
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	MCPP	2300	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Herbicides	Pentachlorophenol	9.6	ug/Kg	U	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Aluminum	770	mg/Kg		J
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Antimony	2.1	mg/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08		Arsenic	2.2	mg/Kg		
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Barium	20	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Beryllium	0.082	mg/Kg	J	
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Cadmium	0.52	mg/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Calcium	430	mg/Kg	В	J
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Chromium	1.6	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Cobalt	2.3	mg/Kg		
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Copper	0.7	mg/Kg	j	
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Iron	3800	mg/Kg	В	
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Lead	2.7	mg/Kg	В	
Sediment	RIVER		SED-SA2-GMCS-9	9/5/08	Metals	Magnesium	370	mg/Kg		J
Sediment			SED-SA2-GMCS-9	9/5/08		Manganese	110	mg/Kg		J
Sediment			SED-SA2-GMCS-9	9/5/08		Mercury	0.021	mg/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08		Nickel	4.8	mg/Kg		
Sediment			SED-SA2-GMCS-9	9/5/08		Potassium	160	mg/Kg		
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Selenium	2.6	mg/Kg	υ	
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Silver	1	mg/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Sodium	100	mg/Kg	U	
Sediment			SED-SA2-GMCS-9	9/5/08	Metals	Thallium	2.6	mg/Kg	U	
Sediment	1		SED-SA2-GMCS-9	9/5/08	Metals	Vanadium	4.1	mg/Kg		
Sediment	RIVER	Station 9 - PDA9	SED-SA2-GMCS-9	9/5/08	Metals	Zinc	7.5	mg/Kg		



Qualifier Definition Table

Sauget Area 2

Groundwater Migration Control System STL Data Qualifier Definitions

Qualifier	Definition	Notes				
Organic Cho	emicals					
*	LCS, LCSD, MS, MSD, MD or Surrogate exceeds the control limits					
А	Tentatively identified compound (TIC) is a suspected aldol condensation product.	Only present in SA-O-1-SB-3 (SDG G53070192) for 1,2,3,4,7,8-HxCDD.				
В	Compound is found in the associated method blank.					
CON	Confirmation Analysis					
D	Concentrations identified from analysis of the sample at a secondary dilution. Compounds whose concentrations exceed the upper calibration range of the					
E	instrument for that analysis.					
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.					
Р	Greater than 25% (40% for CLP) difference for detected concentrations between the two GC columns					
U	Compound analyzed for but not detected at a concentration above the reporting limit.					
Inorganic C	hemical					
В	Compound is found in the associated method blank.					
J	Estimated value - result reported is less than the reporting limit but greater than the instrument detection limit.					
	Indicates that the Method of Standard Additions (MSA) determined the reported					
S	value.					
U	Compound analyzed for but not detected at a concentration above the reporting limit.					
JA	Compound tentatively identified, suing theoretical ratios.					